MERCVRY,

OR THE SECRET and SWIFT Messenger:

Shewing,

How a Man may with *Privacy* and *Speed* communicate his *Thoughts* to a Friend at any distance.

LONDON,
Printed by *I. Norton*, for *Iohn Maynard*, and *Timothy Wilkins*, and are to be sold at the *George* in Fleetstreet, neere Saint *Dunstans* Church,
1641.

To the Right honorable GEORGE, Lord *Berkley*, Baron of *Berkley*, *Mowbray*, *Segrave*, and *Bruce*, and Knight of the Noble Order of the BATH.

My LORD:

I Doe here once more present your Lordship, with the fruit of my leasure studies, as a testimony of my readinesse to serve you, in those sacred matters, to which I devote my more serious houres. I should not have presumed to this Dedication,

had I not beene encouraged by that generouſneſſe and ſweetneſſe of diſpoſition, which does ſo eminently adorne your Lordſhips place and abilities.

If your Lordſhip pleaſe to excuſe this boldneſſe, and to vouchſafe this Pamphlet a ſhelter under your favourable patronage, you ſhall thereby incourage me in thoſe higher ſtudies, which may be more agreeable to that relation, wherein I ſtand, as being

Your Lordſhips ſervant
and Chaplaine,

I. W.

To the Reader.

THat which first occasioned this Discourse, was the reading of a little Pamphlet, styled *Nuntius inanimatus*, commonly ascribed to a late Reverend Bishop: wherein hee affirms that there are certain ways to discourse with a friend, though he were in a close Dungeon, in a besieged City, or a hundred miles of.

Which promises, at the first perusal, did rather raise my wonder then beliefe, having before that time observed nothing, that might give any satisfaction in these particulars. And I should have esteemed them alltogether fabulous had it not beene for the credit of their reputed author.

After this, I did collect all such notes to this purpose, as I met with in the course of my other studies.

From whence when I had received ful satisfaction, I did for mine own further

ther delight compose them into this method.

This I have now published; not for the publique good, (which I doe not think my poore abilities can promote) but to gratifie my brother the Stationer.

The benefits of that trade do chiefly consist in the printing of coppies, and the vanity of this age is more taken with matters of curiosity, then those of solid benefit. Such a pamphlet as this, may be salable, when a more substantiall and usefull discourse is neglected.

I have already attained mine owne ends, both in the delight of composing this, and the occasion of publishing it. And therefore neede not either feare the censure of others, or beg their favour. I could never yet discerne that any Reader hath shewed the more charity, for the Authors bespeaking it. Farewell.

I. W.

To Mercury *the elder,*

On the moſt learned *Mercury* the yonger.

R*Eſt* Maja's *ſonne, ſometimes Interpreter*
Of Gods, and to us men their Meſſenger,
Take not ſuch pains as thou haſt done of old,
To teach men Hieroglyphicks, *and to unfold*
Egyptian *hidden Characters, and how*
Men writ in darke obſcurity: for now
Trithemius *and* Selenus *both are grown*
Such Cryptographers, *as they ſcarce will own*
Thee for their Maſter, and Decipherers know
Such ſecret ways to write thou nere didſt ſhow.
Theſe are but Artiſts, which thou didſt inſpire;
But now thou of a Mercury *art Sire*
Of thine own name, a Poſt with whom the winde,
Should it contend, would be leſs farre behind.
Whoſe meſſage as thy metall ſtrikes the gold,
Quite through a wedge of ſilver uncontrold,
And in a moments ſpace doth paſſe as far
As from the Artike *to th'* Antartike *ſtar.*

So

So proving what is ſaid of influence,
May now be ſaid of his intelligence,
They neither of them having ſuch a quality
As a relation to locality:
No places diſtance hindring their Commerce
Who freely traffick through the Vniverſe,
And in a minute can a Voyage make,
Over the Oceans univerſall Lake.
This ſonne of thine, could any words or praiſe
His learning, worth, or reputation raiſe,
We ſhould be Suiters to him to beſtow
Encomiums *on* himſelfe, *which* we *do owe*
Vnto his worth, and uſe that Eloquence,
Which as his own, muſt claime prehemінence:
For thee, 'tis glory enough thou haſt a ſonne
Of Art, that hath thy ſelfe in Art out-done.

Sir *Francis Kinaſton* Knight.

To

To the unknown Author.

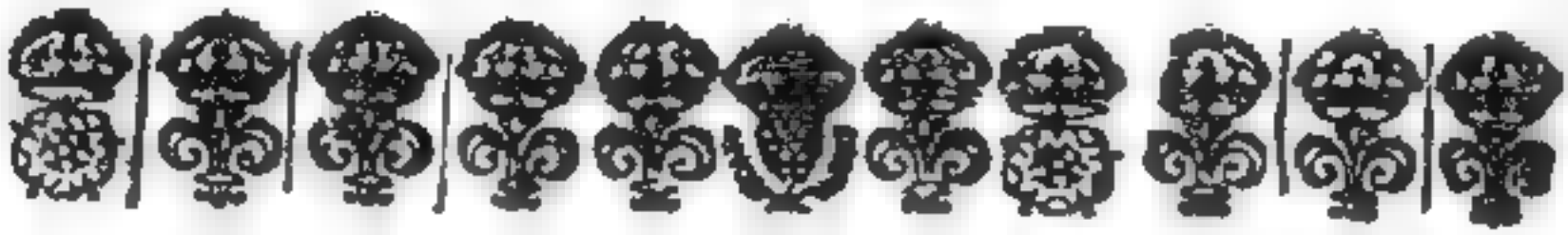
OF old who to the common good applyde,
Or mind, or means, for it were *Deifyde*:
But chiefly ſuch, who new Inventions found;
Bacchus for Wine, *Ceres* that tild the ground.
I know no reaſon time ſhould breed ſuch ods,
(W'have warrant for't) men now may be ſtyl'd
By hiding who thou art, ſeek not to miſs, (Gods.
The glory due to ſuch a Work as this;
But ſet thy name, that thou mayſt have the
Leſt to the *unknown God* we Altars raiſe. (praiſe,

Anthony Aucher, Eſquire.

To my friend the Author.

TO praise thy work, were to anticipate
Thy Readers iudgment, and to iniure fate;
Iniustice to thy selfe, for reall worth
Needs not Arts flattery to set it forth.
Some choose selected wits *to write, as* friends,
Whose Verses, when the work fails, make amends.
So as the buyer has his penny-worth,
Though what the Author write prove spumy froth.
Thou, of a humour crosse to that, hast chose
A friend or two, whose Verse hops like rough prose,
From whose inexpert vain thou canst not look
For lines that may enhaunce the price o'th' book.
Let it commend it self, all wee intend
Is but to shew the world, thou art our friend.

Richard Hatton *Esquire.*



To the Reader.

REader, this Author has not long agoe
Found out another world to this below.
Though that alone might merit great renowne,
Yet in this book he goes beyond the *Moone*.
Beyond the *Moone* indeed, for here you ſee
That he from thẽce hath fetcht down *Mercury*.
One that doth tell us things both *ſtrange* and *new*,
And yet believ't thei'r not more ſtrange then true.
I'me loth to tell thee what rare things they bee,
Read thou the booke and then thou'lt tell them mee.

Tob. Worlrich. I. C. Doct.

To his honour'd Friend *I. W.* on his learned Tract,

The Secret and Swift Messenger.

INimitable Sir, wee here discerne
Maximes the *Stagirite* himselfe might learn.
Were *Plato* now alive hee'd yield to You,
Confessing something might be *Knowne anew.*
Fresh Heresies (New nothings) still appeare
As *Almanacks*, the Births of every Yeare.
This *Dutchman* writes a *Comment*, that *Translates*,
A Third *Transcribes*; Your Pen alone *Creates*
New necessary Sciences; This Art
Lay undiscover'd as the Worlds fift part.
But *Secrecie's* now Publish'd; You reveal
By Demonstration how wee may Conceal.
Our *Legates* are but Men, and often may
Great State-affaires unwillingly betray:
Caught by some sifting Spies, or tell-tale *Wine*,
Which dig up Secrets in the deepest Mine.
Sometimes, like Fire pent in, they outward break,
And 'cause they should be silent, therefore speak.
Nor are Kings Writings safe; To guard their Fame,
Like *Stavola*, they wish their Hand ith' Flame.

Inke

Inke turns to bloud; they oft participate
By wax and Quill sad *Icarus* his fate.
Hence Noblemens bad writing proves a plot;
Their Letters are but Lines, their Names a Knot.
But now they shall no more *Seale* their own *Fall*;
No Letters prove *Killing*, or *Capitall*.
Things passe unknown, and each Ambassadour 's
Strict as the Brest of sacred Confessours:
Such as the Inquisition cannot see;
Such as are forc'd neither by Rack, nor Fee.
Swift Secrecie descends to Humane Powers;
That which was *Plutoes* Helmet, now is Ours.
We shall not henceforth be in pay for ayre,
Transported Words being deare as precious Ware;
Our Thoughts will now arrive before they're stale;
They shall no more wait on the Carriers Ale,
And Hostesse, two Land *Remoraes*, which bind
All to a *Tortoise* pace, though Words be Wind.
This Books a better Arke; we brook no stay,
Maugre the deepest Flood, or foulest Way.
Commerce of Goods and Souls we owe to Two,
(Whose Fames shall now be Twins) *Noah* and You.
Each Bird is turn'd a *Parrot*, and we see
Æsops Beasts made more eloquent by thee.
Woers againe may wing their fetterd Love,
By *Noahs* trusty Messenger the *Dove*.
Torches which us'd only to help our sight,
(Like heavenly fires) do give our Reason Light.
Deaths Harbingers, Arrows, and Bullets prove
Like *Cupids* darts, Ambassadours of Love.

Then

Then your diviner *Hieroglyphicks* tell
How we may Landskips read, and Pictures spell.
You teach how Clouds inform, how smoaks advise,
Thus Saints with Incense talke to *Deities*,
Thus by dumbe Creatures we instructed are,
As the Wise Men were Tutor'd by a Star.
Since we true *Serpents* like doe little wrong
With any other Member but the Tongue;
You tell us how we may by Gestures talke:
How Feet are made to speak, as well as walke:
How Eyes discourse, how mystique Nods contrive;
Making our Knowledge too, *Intuitive*.
A Bell no noise but *Rhetoricke* affords;
Our Musique Notes are Speeches, sounds are Words.
Without a Trope there's Language in a *Flower*,
Conceits are Smelt without a *Metaphor*.
Dark subtleties we now shall soon define,
Each Organs turn'd the sense of *Discipline*.
'Tis to your Care we owe that we may send,
Businesse unknown to any but our Friend.
That which is English Friendship to my Brother,
May be though't Greek or Non-sence to another.
We now may *Homers Iliads* confine
Not in a Nutshell, but a Point, or Line.
Which Art though 't seeme to exceed Faith, yet who
Tryes it, will find both Truth and Reason too.
'Tis not like Juglers tricks, absurd, when shown;
But more and more admir'd, the more 'tis known.
Writing's an Act of Emanation,
And Thoughts speed quick and far as Day doth run.

Richard West. C.C. Ox.

MERCURY.

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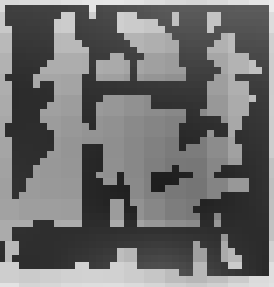

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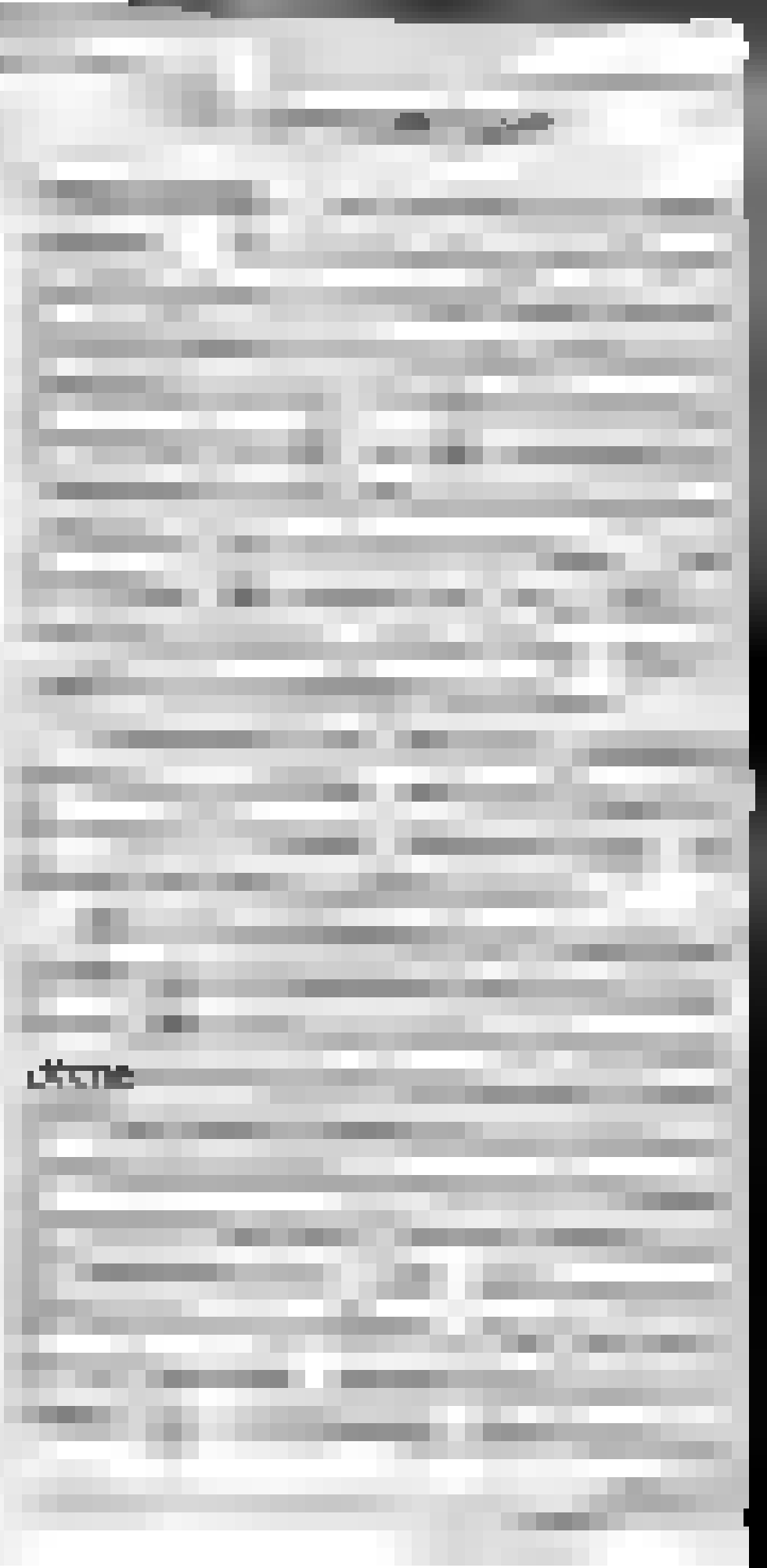

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Publication

Formula

The manner of performing it, is thus. Let there bee a square piece of plane or Tablet of Wood like a Trencher with the twenty foure Letters delineated on the toppe of it at equall distances, and after any order that may bee agreed upon before hand on both the opposite sides, let there bee diverse little reeds on which the string may be stretched or lifted for its severall returnes. As in the following figure.

White

[illegible]

[illegible] Interwords.

[illegible]

3. In the sentence.

[illegible]

Which examples being multiplied, discover to us some specific than inward meaning.

[illegible]

These ways may be yet further diversified, in the first Alphabet according to which the will are differently bent;

[illegible]

[illegible] anthropological

[illegible]

[illegible]

[illegible]

[illegible]

CHAP. VIII.

Of secret writing by more letters then are requisite to the intended meaning.

THe different kinds of secrecy by *equall letters* have beene already handled. The next particular to be discussed, is concerning the wayes of hiding any private sence, under *more letters* then are required to the words of it.

Of which kind there may be divers particulars, some of them in use amongst the Antients.

1. A writing may be so contrived, that onely one letter in a verse shall bee significant. As it was in those remarkeable *Acrostick*s made by a *Sybill* concerning our Saviour: where the letters at the beginning of each verse, being put together, made up these words, Ἰησοῦς Χριστὸς Θεοῦ υἱὸς σωτήρ. *Sybilla Erythræa.*

worthy Iesus Christ the Sonne of God, Saviour.

Beda lib. de Sybillis

The translation of these you may see in St. *Augustine de Civit. Dei lib.* 18. *cap.* 23. And the originall are mentioned by *Ludovicus Vives*, in his notes upon that place.

According unto this, doth *Plautus* contrive the name of his Comedies in the first letters of their arguments. But this way is so ordinary in practise, that it needs not any further explication.

2. The inward sence hath likewise beene conveyed by some single letters of severall words in the same verse. As in that common distich.

Vale.

Mitto tibi caput Veneris, ventremque DiANæ

LatrónisQue caput, posteriora canE.

3. Sometimes one letter in each word was only significant. By which way of secret expression, the Holy-Ghost (say the Rabbies) hath purposely involved many sacred myste-

ries

riesin Scripture. When these significant letters were at the beginning of each word, the Cabalists, in their learning, called such an implicit writing ראשי תיבות *Capita dictionum.* When they were at the latter end, then was it stiled סופי תיבות *Fines dictionum.* Both being reckoned as species of that Cabalisme which they called נוטריקון *Notaricon*, imposed by some later Rabbies from the Latin word *Notarius.*

The capitall letters.

Of the first sort, is that collection from those eminent words, Gen. 49. 10. יָבֹא שִׁלֹה וְלוֹ *Shilo shall come, and in him*, &c. where the capitall letters make up the word ישו *Iesu.*

So Psal. 73.17 יְהִי שְׁמוֹ לְעוֹלָם יִנּוֹן *His Name shall continue, and in him shall be blessed, &c.* which place do's expressely treate concerning the Messias his name, and therefore seemes unto the Jewes, to be of strong consequence for the proofe of Christianity. For so much is

think

that Nation befooled in their absurd dotage, upon these triviall literall collections, that a reason of this nature is of greater force unto them, then the most evident, solid demonstration that may be urged. *Ludovicus Carret* a famous Jew, Physician to the French King, being himselfe converted, and writing an Epistle to this purpose, unto those of his owne nation, he do's chiefely insist upon the arguments of this kind, as being in his opinion of greatest efficacy to prove the truth of Christian Religion.

Lib. Vfo-rum Divi-nitatis.

Of the other sort is that passage *Gen.* 1. 1. בראשית אלהים את where the finall letters make up the word אמת or *Truth*. Which kind of Cabalisme is fixe times repeated in the history of the Creation. As if *Moses* by such an artificiall contrivance of the letters at the beginning of his writings, did purposely commend unto our beliefe his following bookes. Unto this *David* is thought

The finall letters.

to

to allude *Psal.* 119. 160. *The beginning of thy word is* אמת *Truth.* Of this nature likewise is that observation from *Exod.* 3. 13. כי מה שמו מה. *when they shall say unto me, what is his name, &c.* Where the finall letters answere יהוה *Iehovah.*

It were an easie matter for a man that had leasure and patience for such enquiries, to find out sundry arguments of this kind, for any purpose.

4. There is another way of hiding any secret sence under an ordinarie epistle, by having a * plate with certaine holes in it, through which (being laid upon the paper) a man may write those letters or words, that serve to expresse the inward sence; the other spaces being afterwards filled up with such other words, as in their conjunction to these former, shall conteine some common unspected businesse.

5. There is also another intricate way to this purpose, much insisted on by * *Iritemius*, *Porta* and

Cardan de subtil. lib. 17. Porta de furt. lib. 2. cap. 18. Such as Printers use when they are to insert diverse red letters amongst the black.

Selenus. When each usuall word or forme of an epistle, is varied to as many differences as there are letters, unto which they must all of them be severally assigned. But these two latter inventions (though they be of great secrecy, yet) because they require so much labour and trouble in the writer, I shall therefore passe them over without any further enlargement.

CHAP. 10.

CHAP. IX.

Of concealing any written sence under barbarous words, and such as shall not seeme to be of any signification. How all the letters may be expressed by any five; three, or two of them. Of writing with a double Alphabet. How from these two last wayes together, there may be contrived the best kind of secret writing.

ALL the wayes of secrecy by *more letters*, already specified, doe make the writing appeare under some other sence, then what is intended, and so consequently are more free from suspition: There are likewise some other inventions to expresse any inward sence by barbarous words, wherein onely the first, and middle, and last letters shall be significant. As in this example.

Fildy, fagodur wyndeeldrare disc ogure rantibrad.

Which in its resolution is no more then this.

Fly for we are discovered.

To this purpose likewise is that other way of expressing the whole Alphabet, by any five, or three, or two of the letters repeated. And though such a writing, to ordinary appearance, will seeme of no signication at all, and so may seeme of lesse use; Yet because a right apprehension of these wayes, may conduce to the explication of some other particulars that follow, it will not be amisse therefore to set them down more distinctinly.

All the letters may be expressed by any five of them doubled. Suppose A B C D E.

A B C D E F G H I K L M N
aa ab ac ad ae ba bb bc bd be ca cb cc

O P Q R S T V W X Y Z. &
cd ce da db dc dd de ea eb ec ed. ee

According to which, these words, *I am betrayed*, may bee thus described.

Bd aacb abaedddbaaccacad.

Three letters being transposed through three places doe give sufficient difference, whereby to expresse the whole Alphabet.

A	B	C	D	E	F	G	H	I
aaa	aab	aac	baa	bba	bbb	bbc	caa	cca
K	L	M	N	O	P	Q	R	S
ccb	ccc	aba	abb	abc	aca	acb	acc	bca
T	V	W	X	Y	Z	&		
bcb	bcc	bab	cba	cbb	cbc	bac		

Hasten unto me.

Caa aaa bca bcb bba abb bcc abb bcb abc aba bba.

The whole Alphabet expressed by any two letters in five places.

Two letters of the Alphabet, being transposed through five places, will yield thirty two differences, and so will more then serve for the foure and twenty letters. Unto which they may be thus applyed.

A	B	C	D	E
aaaaa.	aaaab.	aaaba.	aaabb.	aabaa.
F	G	H	I	K
aabab.	aabba.	aabbb.	abaaa.	abaab.
L	M	N	O	P
ababa.	abaab.	abbaa.	abbab.	abbba.
Q	R	S	T	V
abbbb.	baaaa.	baaab.	baaba.	baabb.
W	X	Y	Z	
babaa.	babab.	babba.	babbb.	

aababababababba aaaaababaaaaaaababba.

f I y a w a y

Writing by a double Alphabet.

There is yet another way of secrecy by more letters then are naturally required to the inward sence, if we write with a double Alphabet, wherein each letter shall in the fashion of it, beare some such small distinction from the other of the same kind, as is usuall in common, mixed writing.

For Example.

The first Alphabet.

Aa. Bb. Cc. Dd. Ee. Ff. Gg. Hh.
Ii. Kk. Ll. Mm. Nn. Oo. Pp. Qq
Rr. Ss. Tt. Vuu. Ww. Xx. Yy. Zz

The second Alphabet

Aa. Bb. Cc. Dd. Ee. Ff. Gg. Hh
Ii. Kk. Ll. Mm. Nn. Oo. Pp. Qq.
Rr. Ss. Tt. Vuv. Ww. Xx. Yy. Zz

1. Write an Epistle of an ordinary matter, or (if it be needfull) contrary to what you intend. Let the body of it consist chiefely of

the first Alphabet, onely inserting (as you have occasion) such letters of the second, as may expresse that inward meaning which you would reveale to a confederate.

For example, from those that are besieged.

We prosper still in our affaires and shall (without having any further helpe) endure the siege.

In which clause, the letters of the second Alphabet are onely significant, expressing this inward sence.

Wee perish with hunger helpe us.

But because the differences betwixt these two Alphabets may seeme more easily discoverable, since they are both generally of the same kind; the letters of the second being all of them more round and full then the other; Therefore for their better secrecy in this particular, it were safer to mixe them bothby compact, that they might not, in themselves, be distinguishable.

The best way of secret writing. *Bacon. A gment. scient. l. 6. cap. 8.*

Now if this kind of writing, be mixed with the latter way of Secrecy, by two letters transposed through five places; Wee may then write *omnia per omnia*, which (as a learned man speakes) is the highest degree of this Cyphering.

For

For supposing each letter of the first Alphabet to bee instead of the letter A, and those of the other for B, wee may easily inscribe any secret sence in any ordinary letter, onely by a quintuple proportion of the writing, infolding to the writing infoulded. As for example.

All things do happen according to our desires the particulars you shall vnder stand when wee meete at the appointed time and place, of which you must not faile by any means The success of our affairs dos much depend vpon the meeting that wee have agreed vpon.

The involved meaning of which clauſe is this.

Fly, for we are diſcovered, I am forced to write this.

If you ſuppoſe each letter of the firſt Alphabet to be inſtead of A, and thoſe of the ſecond for B, then wil the former clauſe be equivalent to this following deſcription.

Aabab	ababa	babba	aabab	abbab	baaaa	babaa
F	l	y	f	o	r	w
aabaa	aabaa	aaaaa	baaaa	aabaa	aaabb	
e	e	a	r	e	d	
abaaa	baaab	aaaba	abbab	baabb	aabaa	
i	ſ	c	o	v	e	
baaaa	aabaa	aaabb	abaaa	aaaaa	ababb	
r	e	d,	I	a	m	

aabab

aabab	abbab	baaaa	aaaba	aabaa	aaabb
f	o	r	c	e	d
baaba	abbab	babaa	baaaa	abaaa	baaba
t	o	w	r	i	t
aabaa	baaba	aabbb	abaaa	baaab.	
e	t	h	i	s	.

This way of secrecy may be serviceable for such occasions as these. Suppose a man were taken captive, he may by this meanes discover to his friends the secrets of the enemies Camp, under the outward forme of a letter perswading them to yield. Or suppose such a man were forced by his owne hand writing to betray his cause and party, though the words of it in common appearance may expresse what the enemie do's desire; yet the involved meaning, (which shall be legible onely to his confederates) may containe any thing

thing elſe, which he ha's a mind to diſcover to them. As in the former example.

But now if there be a threefold Alphabet, (as is eaſie to contrive,) then the inward writing will beare unto the outward but a triple proportion, which will be much more convenient for inlarging of the private intimations.

And this way of writing is juſtly to be preferred before any of the other, as contavning in it more eminently, all thoſe conditions that are deſirable in ſuch kind of inventions. As,

1. 'Tis not very laborious, either to write or reade.

2. 'Tis very difficult to be decyphered by the enemie.

3. 'Tis voyd of ſuſpition.

But

But by the way, 'tis to be generally observed, that the mixture of divers kinds of secret writing together (as suppose this with the key-character) will make the inward sence to be much more intricate and perplexed.

CHAP. 10.

CHAP. 10.

Of writing any secret sense, by fewer letters *then are required to the words of it. The use of this amongst the Jews and Romans.*

AS the sense may be obscured, by writing it with more letters, then are required to the words of it, so likewise by fewer. Abbreviations have beene anciently used in all the learned languages, especially in common forms, and phrases of frequent use. Somtimes by contracting words, when some parts of them did stand for the whole. So in the Hebrew ובו for וכולו *et totum illud*, which is all one with our *et cætera* &c. כלו for כלומר *secundum dicere*, equivalent to our *viz.* or *v. g. verbi gratia.* So likewise in the Greek χριστ for χριστος, and ἀνθρωπ. for ἀνθρωπος. And in the Latin *Dnus* for *Dominus*, *aa* for *Anima*, and the like. But these were rather for the speed of writing then the Secrecie.

Buxtorf. de Abbreviat. in in tio.

Somtimes words were expressed only by their first letters. Thus did the Jews write all their memorialls, and common forms, which are largely handled by *Buxtorfe*. Hence was it, that their Captain *Judas* had his name of *Maccaby*. For being to fight against *Antiochus*, he gave that saying for his watchword, *Ex.* 15. מי כמך באלהים יהוה. *who is like unto thee* (*O Lord*) *amongst the Gods*? inscribing in his ensignes the capitall letters of it; מכבי *Macabi*. Whereupon after the victory, the Souldiers styled their Captaine by that name.

Ibid.

'Tis observed by the Rabbies, that many grand mysteries are this way implied in the words of Scripture. Thus, where it is said, *Psalm.* 3. רבים *Many rise up against me*: 'tis interpreted from the severall letters, *Resh* the Romans, *Beth* the Babylonians, *Jod* the Jonians or Grecians, *Mem* the Medes. Answerable unto which, that place in *Gen.* 49. 10. (speaking of *Shilo*, unto whom יקהת the *gathering* of the people shall

ſhall be) is by another Rabbie applied to the Jews, Chriſtians, Heathens, and Turks.

Upon theſe grounds likewiſe, is that argument to prove the Trinity, from the firſt verſe of *Geneſis*. ברא אלהים. The word אלהים *Elohim*, being of the plurall number, is thought to be that divine name, which denoteth the perſons of the Deitie; which perſons are more particularly intimated in the letters of the verbe ברא, that anſwers unto it: ב *Beth* being put for בן the Son, ר *Reſh* for רוח the Holy Ghoſt, א *Aleph* for אב the Father. And if you will beleeve the Jews, the Holy ſpirit hath purpoſely involved in the words of Scripture, every ſecret that belongs to any Art or Science, under ſuch Cabaliſms as theſe. And if a man were but expert in unfolding of them, it were eaſie for him to get as much knowledge as *Adam* had in his innocencie, or humane nature is capable of.

Theſe kind of myſterious interpre-

tations from particular letters doe seeme to be somwhat favoured, by Gods addition of the letter ה unto the name of *Abram* and *Sara*, upon the renewing of his covenant with them: which in all likelihood was not without some secret mysterie. That being the chiefe letter of the *Tetragrammaton*, might perhaps intimate that amongst their other posterity, with the promise of which hee had then blessed them, they should also be the parents of the Messias, who was *Jehovah*.

Gen.17.5. 15.

This likewise others have confirmed from the example of Christ, who cals himself *Alpha* & *Omega*. *Revel.*1.8.

Vide Tertul.lib.de præscr.c.50

But though such conjectures may be allowable in some particulars; yet to make all Scriptures capable of the like secrets, does give such a latitude to mens roving & corrupt fancies, as must needs occasion many wild and strange absurdities. And therfore *Irenæus* does fitly observe, that from such idle collections as these, many heresies of the *Valentinians* and *Gnosticks* had their

Iren.lib.1. cap.13.

their first beginnings.

As this way of short writing by the first letters, was of antient use amongst the *Jews*, so likewise amongst the *Romans*: which appeares from many of their contractions yet remaining, as *S.P.D.Salutem plurimam dicit.S.P.Q.R. Senatus populusque Romanus.* CR. *Civis Romanus.* VC. *Vrbs condita.* And the like.

These single letters were called *Siglæ*, *per Syncopen*, from the obsolete word *Sigillæ*, whence *Sigillatim*. They were usually inscribed in their coines, statues, arms, monuments, and publike records. You may see them largely treated of by *Valerius Probus*, where he affirms the study of them to be very necessary, for one that would understand the Roman affaires. *His enim exprimebant nomina Curiarum, Tribuum, Comitiorum, Sacerdotiorum, Potestatum, Magistratuum, Præfecturarum, Sacrorum ludorum, Rerum urbanarum, rerum militarium, Collegiorum, Decuriarum, Festorum, Numerorum, Mensurarum, Juris civilis, & similium.*

Lib. de liter. antiquis. As it is set forth by *Iacobus Mazochius*

They were first used by the Notaries at Senates and other publike assemblies, and from thence retained in their Statutes & civil Lawes: Whence *Manilius* makes it the note of a good Lawyer.

— *Qui legum tabulas & condita jura*
Noverit, atq; notis levibus pendentia verba.

Thus (saith *Isidor*) (A) inversed ∀ did formerly stand for *pupilla*, and M inversed W for *mulier*. By these letters *D E R I C P*, is signified *De ea re ita censuerunt patres*.

Isidor. Bibliand. de ratione com. ling.

When the Judges were to inscribe their severall opinions on a little stone or *Tessera*, to be cast into the urne, by the note *A*, they did absolve, by * *K* condemn; by *N.L. Non liquet*, they did intimate that they could not tell what to make of the businesse, and did therefore suspend their judgements.

Pet. Crinit. Honest. Disc. lib. 6. cap. 8.

* From the Greek. καταδικάζω.

But because of those many ambiguities, which this contracted way of writing was liable unto, and the great inconveniences that might happen thereupon in the misinterpretation of Lawes:

Lawes: therefore the Emperour *Justinian* did afterwards severely forbid any further use of them, as it were, calling in all those Law bookes that were so written. *Neq; enim licentiam aperimus ex tali codice in judicium aliquid recitari.* Lib. 1. Cod. Tit. 17. leg. 1. 2.

The chiefe purpose of these antient Abbreviations amongst the Romans, was properly for their *speed.* But it is easie to apprehend, how by compact, they may be contrived also for *Secrecy.*

CHAP. II.

Of writing by invented Characters.

The distinction of these into such as signifie either { letters. words. notions.

The generall rules of unfolding and obscuring any letter-characters. How to expresse any sense, either by points, or lines, or figures.

BEsides the wayes of Secret writing by the common letters; there may

may likewise be divers others by invented notes.

The difference of characters, whereby severall languages are exprest, is part of the second generall curse in the confusion of tongues. For as before there was but one way of speaking, so also but one way of writing. And as now, not only nations, but particular men, may discover their thoughts by any different articulate sounds, so likewise by any written signes.

These invented characters in the generall, are distinguishable into such as signifie either

1 Letters.
2 Words.
3 Things, and notions.

The letter character.

First, concerning those that signifie letters. To which kind, some learned men refer the Hebrew character that is now in use: Affirming that *Ezra* first invented it, thereby the better to conceale the secrets of their Law, and that they might not have so much as

Hieronym. præf. ad lib. Regum. Ioseph Scal. notis ad Euseb.

their

their manner of writing common with the *Samaritans* & other Schismaticks.

'Twere but needlesse to set downe any particulars of this kind, since it is so easie for any ordinary man to invent or vary them at pleasure.

The rules that are usually prescribed for the unfolding of such characters, are briefly these.

1 Endeavour to distinguish betwixt the vowells and consonants. The vowells may be knowne by their frequencie, there being no word without some of them. If there be any single character in English, it must be one of these three vowells, *a. i. o.*

2 Search after the severall powers of the letters. For the understanding of this, you must mark which of them are most common, and which more seldome used. (This the Printers in any language can easily informe you of, who doe accordingly provide their sets of letters.) Which of them may be doubled, and which not, as *H. Q. X. Y.* And then for the number of vowells

vowells or consonants in the beginning, middle, or end of words, a man must provide severall tables, whence hee may readily guesse at any word, from the number and nature of the letters that make it. As what words consist only of vowells; what have one vowell and one consonant, whether the vowell be first. As in these words. *Am. an. as. if. in. is. it. of. on or. us.* Or last, as in these words. *Be. he. me. by. dy. ly. my. ty. do. to. so.* &c. And so for all other words according to their severall quantities and natures.

These tables must be various according to the difference of languages. There are divers the like rules to be observed, which are too tedious to recite. You may see them largely handled by *Baptista Porta*, and *Gustavus Selenus*.

In these cases Orthographie is not to be regarded.

The common rules of unfolding being once knowne, a man may the better tell how to delude them. Either by leaving out those letters that are of lesse use, as *H. K. Q. X. Y.* and putting other

other characters instead of them, that shall signifie the vowells: So that the number of this invented Alphabet will be perfect, and the vowells, by reason of their double character, lesse distinguishable. Or a man may likewise delude the rules of discovery, by writing continuately, without any distinction betwixt the words, or with a false distinction, or by inserting *nulls* and *non-significants*, &c.

These Characters are besides lyable to all those other wayes, whereby the common letters may bee obscured, whether by changing their *places*, or their *powers*.

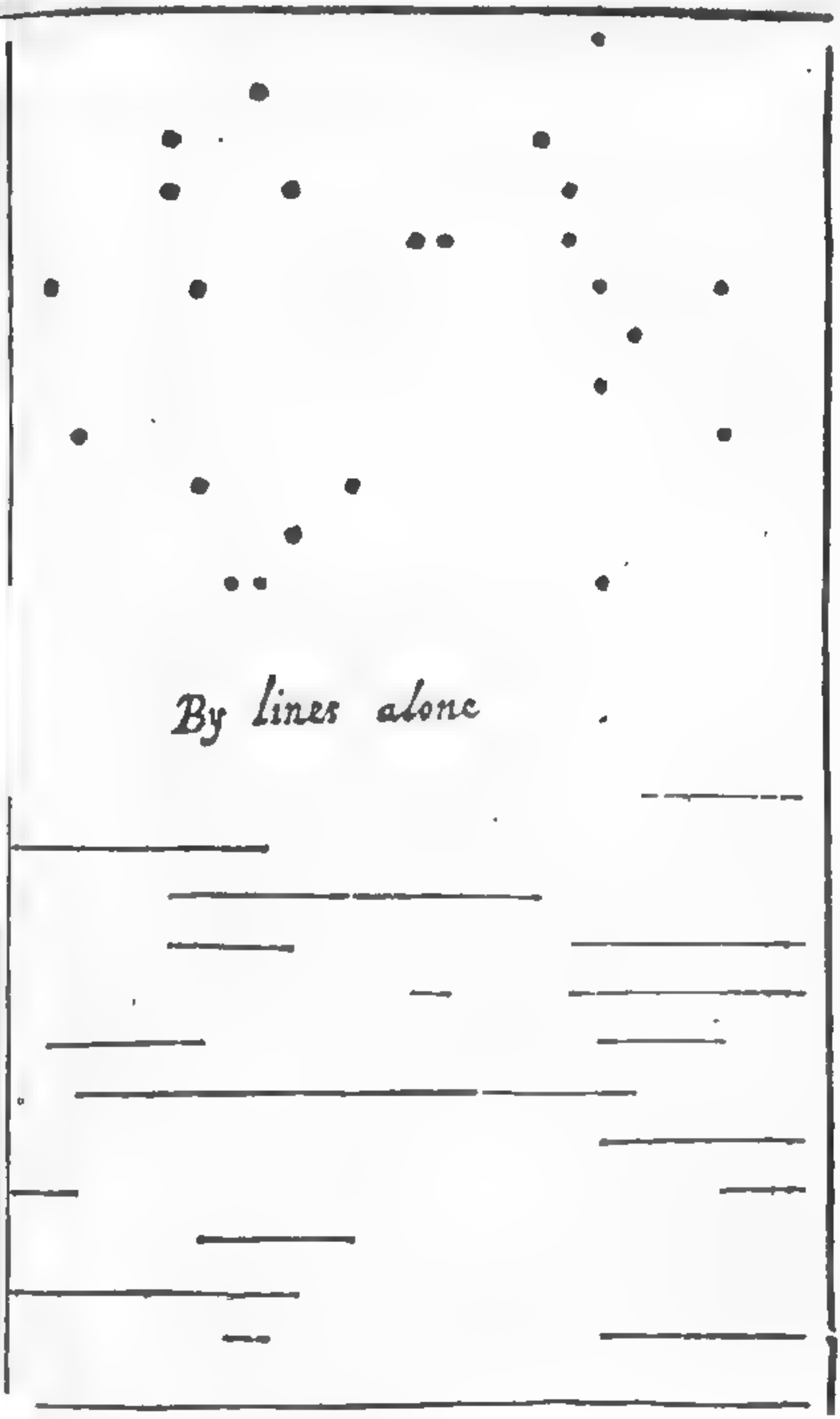
The particulars of this kind may be of such great variety as cannot be distinctly recited. But it is the grand inconvenience of all these wayes of secrecie by invented Characters, that they are not without suspition.

For the remedying of which, there have beene some other inventions of writing by points, or lines, or figures; wherein a man would never mistrust

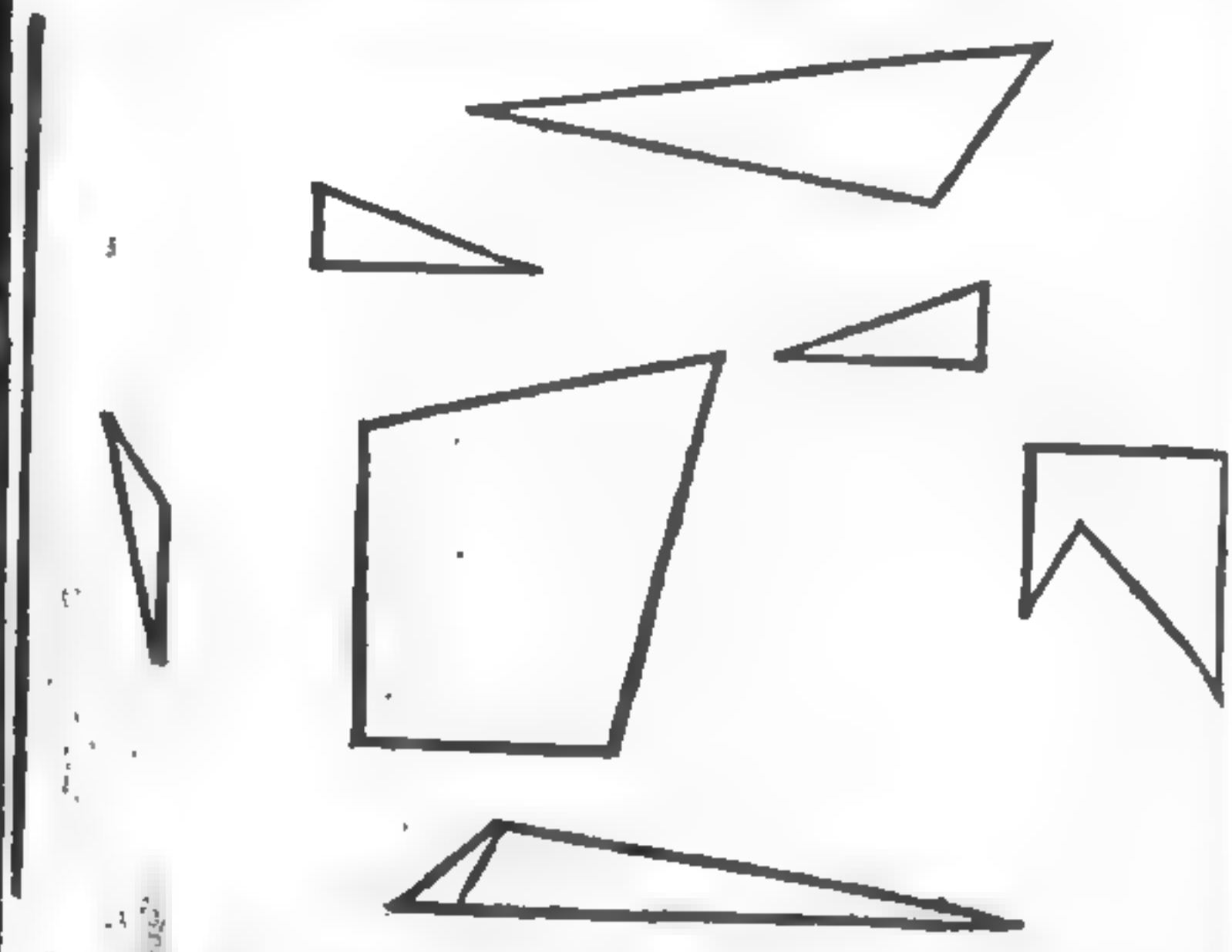
any

any private meſſage: there being nothing to be diſcerned in theſe kindes of intimation, but only, either ſome confuſed, and caſuall, or elſe ſome Mathematicall deſcriptions. As you may ſee in theſe following examples.

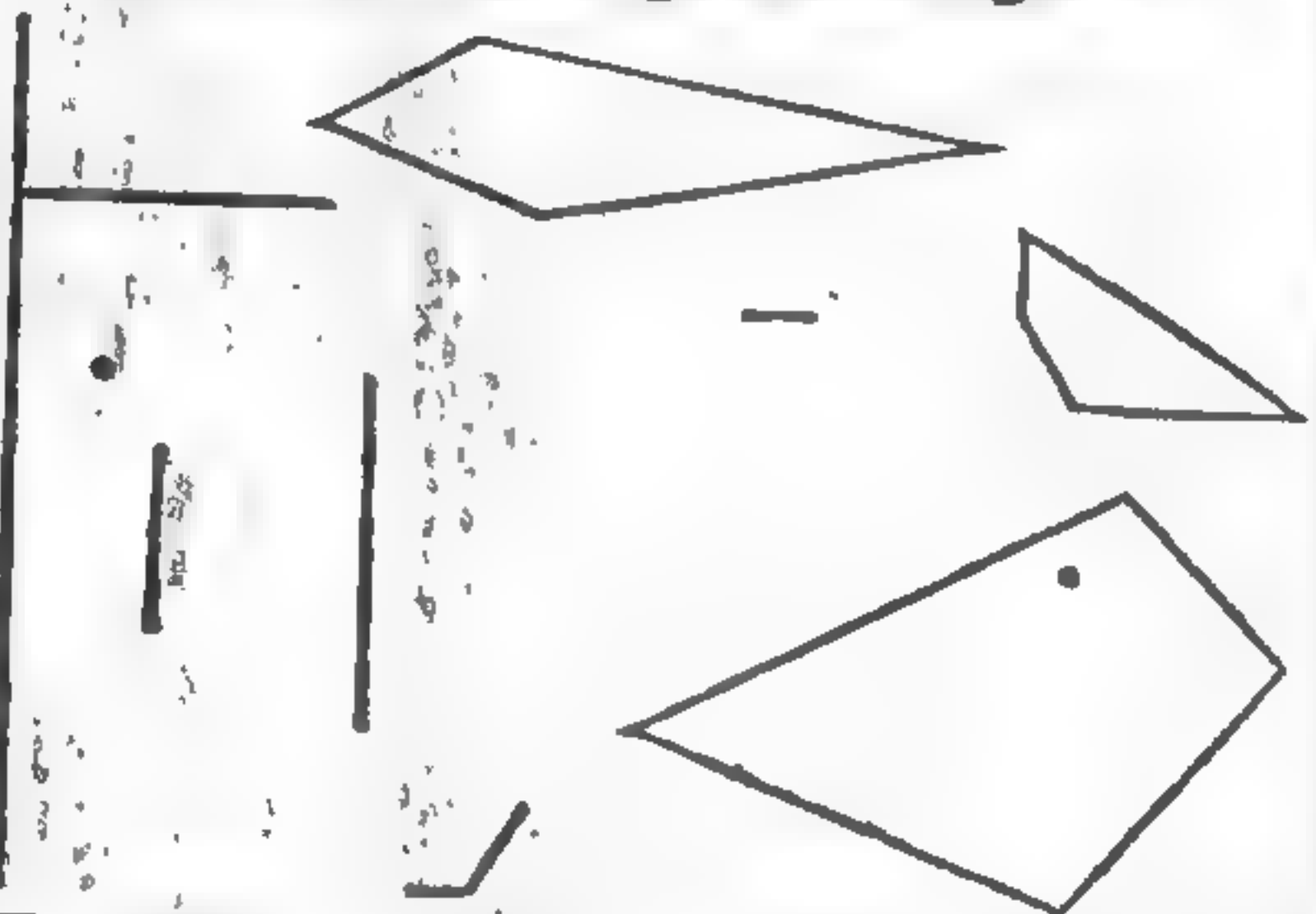
By points alone.


By lines alone

By Mathematicall Figures.



By Points, Lines, and Figures mixed together.



Each of which figures doe expresse these words.

There is no safty but by flight.

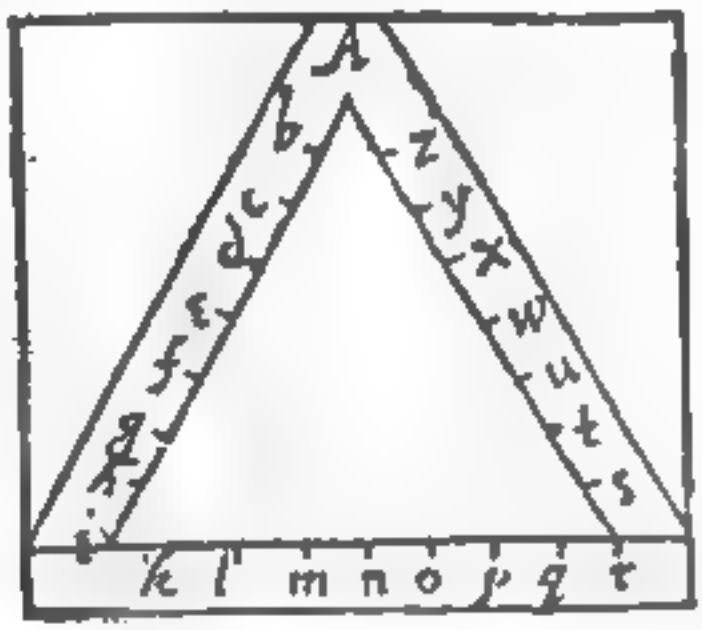
The direction both for the making and unfolding of these descriptions, is this. Let the Alphabet be described at equall distances, upon some thinne and narrow Plate, Pastboard, or the like, thus.

Let the sides of the Paper which you are to write upon, be secretly divided into equall parts, according to the breadth of the Plate: and then by application of this to the Epistle, it is easie to conceive, how such a writing may be both composed and resolved. The Points, the ends of the Lines, and the Angles of the figures do each of them by

by their different situations, expresse a severall letter.

This may likewise be otherwise performed, if the Alphabet be contrived in a Triangular forme, the middle part of it being cut out.

And so for a square or round form.



The larger these Directories are, by so much the lesse lyable unto errour will the writing be, that is described from them.

Ioh Walchius fab. 9.

It is easie to apprehend, by these particulars, how a man may contrive any private saying in the forme of a Landskip or other picture. There may be divers the like ways whereby this invention of secrecie may be further obscured; but they are in themselves so obvious, that they need not any larger explication.

CHAP. 12.

Of Characters that expresse words. *The first invention of these. Of those that signifie things and notions, as Hieroglyphicks, Emblemes.*

THe next particular to be discoursed of, is concerning Characters that expresse *words*. The writing by these, is properly styled *Stenographie*, or Short-hand, *Scripturæ compendium, cum verba non perscribimus sed signamus*, saith *Lypsius*. The art of them is to contrive such figures for severall syllables, as may easily bee joyned together in one forme, according as different words shall require. Thus 'tis ordinary, to represent any proper name, by some such unusuall character, as may contain in it all the letters of that name for which it is intended. Of this nature was that angular figure, so much used by the *Grecians* of old: which might bee resolved into the letters *vyna*.

Cent. 1. ad Belg. Epist. 27.

Schikard. Happer. Disp. 5.

This marke was esteemed so sacred amongst the Ancients, that *Antiochus Soter*, a perpetuall conquerour, did always instamp it upon his Coine, and inscribe it on his Ensignes; unto which he did pretend to be admonished in a dream, by an apparition of *Alexander* the great. And there are many superstitious women in these times, who believe this to bee so lucky a character, that they alwayes worke it upon the swadling clothes of their young children, thinking thereby to make them more healthful and prosperous in their lives. Unto this kind also, some referre the characters that are used in Magick, which are mayntained to have, not only a secret signification, but likewise a naturall efficacie.

This short-hand writing, is now so ordinary in practice (it being usuall for any common Mechanick both to write

and

and invent it) that I shall not need to set downe any particular example of it. In ancient times, it was not so frequently used: But then there was a twofold kind of it.

Private.
Publick.

These private characters were practised by the *Roman* Magistrates, and others of eminent favour amongst them: Who being often importuned to write in the commendation of those persons they knew not, were faine to agree upon some secret notes, whereby their *serious* Epistles, might be distinguished from those of *forme*. Whence the Proverbe arose, ***De meliori nota commendare.***

And therfore *Pancirollus* reckons it amongst these later inventions, *lib. de Reperit. cit.* 14.

Casaubon. notis in Æn. Poliorcet cap. 31.

The other characters of publike and common use, are many of them explained by ***Valerius Probus*** in his booke ***de literis antiquis.*** And there is a whole Volume or Dictionary of them, set forth by ***Janus Gruterus.*** From the practice of these came the word ***Notarius***, as Saint[a] ***Austin*** observes.

De notis Tironis & Senec.

a *De doct. Christ. Lib.* 2 *cap.* 26.

The first invention of them is commonly ascribed to *Tyro*, who was a servant unto *Cicero*. So [b] *Eusebius*, and [c] *Polyd. Virgil.* But *Trithemius* affirmes that *Cicero* himselfe writ a Treatise on this subject, which was afterwards augmented by Saint *Cyprian*. And that hee had found in an old Library, the copy of a Psalter, written in these characters, inscribed by some ignorant man, with this title: *Psalterium in linguâ Armenicâ.*

That *Cicero* was not unacquainted with these notes, may be evident from that passage to *Atticus*: *Quod ad te de legatis scripsi, parum intellexit, credo quia sic omnia scripseram.*

Pet. Diaconus attributes the first invention of these, to the old Poet *Ennius*; whose beginnings in this kind, did afterwards receive successive addition, from the works of *Tyro*, *Philargirus*, *Aquila*, and *Seneca* the Father, by whom they were increased to the number of 5000.

But *Hermannus Hugo*, a late Jesuite, will have this short-hand writing to be

b *In Chron.*
c *De inven' rerum lib. 2 cap. 8. De Polygr.*
Lib. 13 ad Attic. ep. 32
Prolog. not. Conrad. Imp. Isidor. Origin. lib. 1. c. 21.
De Orig. scribendi, c. 18. juxta finem.

be of farre more ancient uſe; affirming that *David* alludes to the practice of it, in that phraſe, *Pſal.*45.1. *The pen of a readywriter.* And that the writing upon the wall in *Daniel* 5.25. which ſo puzled the *Chaldean* Wizards, was deſcribed in ſuch kinde of Characters. But whether this were ſo or not, is not much materiall: It is ſufficiently pertinent to the preſent enquiry; that the uſe of theſe word-characters may well enough conduce to the ſecrecie of any written meſſage.

The third and laſt ſort of ſignes, that have been anciently uſed for the expreſſion of *things* and *notions*, are either *Hieroglyphicks* or *Emblemes.*

Of Hieroglyphicks.

1 Concerning *Hieroglyphicks.* The word ſignifies *ſacred ſculpeures*, which were engraven upon Pillars, Obeliſces, Pyramides, and other monuments before the invention of letters. Thus the *Egyptians* were wont to expreſſe their minds, by the pictures of ſuch creatures, as did beare in them ſome naturall reſemblance to the thing intended.

Tacit. Annal. lib. 11.

Polyd. Vir. de Invent. lib. 9. c. 11.

By the shape of a Bee they represented a King, intimating that hee should be endowed with Industry, Honey, and a Sting. By a Serpent with his taile in his mouth, the yeere, which returnes into it selfe. And (which was a kind of propheticall Hieroglyphicke) by the signe of a Crosse they did anciently denote *spem venturæ salutis*, or *vitam æternam*, as *Pet. Crinitus* relates out of *Ruffinus*. * *Philo* reckons up the knowledge of these, amongst those other abstruse *Egyptian* Arts, wherein *Moses* is said to be so expert. And *Clemens* relates of *Pythagoras*, how hee was content to be circumcised, that so hee might be admitted to the understanding of those many and great mysteries, which were this way delivered by the ancient Priests, who did conceale all their Learning under such kind of *Magicall* expressions, as the Poet styles them.

De honestâ disciplinâ, lib 7. cap. 2

** Lib. de vita Mosis.*

Lib. 1. Stromat.

Lucan. l. 3.

Nondum flumineas Memphis *contexere byblos*
Noverat, & saxis tantùm volucresque feraque,
Sculptaq; servabant magicas animalia linguas.

Plu-

Plutarch speaks of a Temple in *Egypt* dedicated to *Minerva*, in the front of which, there was placed the image of an *Infant*, an *old man*, a *Hawke*, by which they did represent God, a *Fish* the expression of hatred, and a *Sea-horse*, the common Hieroglyphicke of Impudence. The construction of all being this, *O yee that are born to die, know that God hateth Impudence.*

Libro de Isid. & Osiride.

Of this nature were those presents sent unto *Darius*, when hee was almost wearied in his war against the *Scythians*: which were a Bird, a Mouse, a Frog, and certain Arrows: Intimating that unlesse the *Persians* could flie as *Birds*, or hide themselves under water as *Frogs*, or inhabit the cavernes of the earth as *Mice*, they should not escape the *Scythian Arrows*. Of this kinde likewise were some military signes amongst the *Romans*. When any thing was to bee carried with silence and secrecie, they lifted up the representation of a *Minotaur*, thereby teaching the Captains, that their counsels and contrivances

Herodot. Melpom. l. 4 cap 130. Clem. Alex. Strom. 5.

Pierius Hieroglyph. l. 3 cap. 38.

trivances must bee as inextricable as a Labyrinth, which is feigned to be the habitation of that Monster.

Emblems from the *Greeke* word ἐμβάλλω, *interserere, injicere.*

2 Like unto these Hieroglyphicks, are the expressions by Emblems. They were usually inserted as ornaments, upon vessels of gold, and other matters of state or pleasure. Of this nature are the stamps of many ancient medalls, the Impresses of Armes, the Frontispices of Books, &c.

The kinds of them are chiefly twofold.

1 *Naturall*, which are grounded upon some resemblance in the propertie and essence of the things themselves. So a Dolphin which is a swift creature, being described upon an Anchor, which serves for the stay and rest of a Ship, signifies *Festina-lente*, Deliberation in counsell, and Dispatch in execution. A young Storke carrying the old one, Filiall gratitude.

2 Historicall, Those that refer to some common relation. So the picture of *Prometheus* gnawed by a Vulture, sig-

ſignifies the deſert of overmuch curioſitie. *Phaeton*, the folly of raſhneſſe. *Narciſſus* the puniſhment of ſelf-love.

It was formerly eſteemed a great ſigne of wit and invention, handſomely to convey any noted ſaying, under ſuch kind of expreſsions.

CHAP. 13.

Concerning an univerſall Character, that may be legible to all nations and languages. The benefit, and poſſibility of this.

AFter the fall of *Adam*, there were two generall curſes inflicted on Mankinde: The one upon their *labours*; the other upon their *language*.

Againſt the firſt of theſe, we do naturally endeavour to provide, by all thoſe common Arts and Profeſsions, about which the World is buſied: ſeeking thereby to abate the ſweat of their brows in the earning of their bread.

Againſt the other, the beſt help, that wee can yet boaſt of, is the Latine tongue,

tongue,and the other learned languages, which by reaſon of their generalitie, do ſomewhat reſtore us from the firſt confuſion. But now, if there were ſuch an univerſall character,to expreſſe things and notions, as might be legible to all people and countries,ſo that men of ſeverall Nations might with the ſame eaſe, both write and read it; this invention would be a farre greater advantage in this particular, and mightily conduce to the ſpreading and promoting of all Arts and Sciences: Becauſe that great part of our time,which is now required to the Learning of words, might then be employed in the ſtudy of things. Nay, the confuſion at *Babel* might this way have been remedied, if every one could have expreſſed his own meaning by the ſame kinde of Character. But then perhaps the art of Letters was not invented.

That ſuch a manner of writing is already uſed in ſome parts of the World, the Kingdomes of the high *Levant*, may evidently appeare from divers

divers credible Relations. *Trigaultius* affirms, that though those of *China* and *Japan* doe as much differ in their language, as the *Hebrew* and the *Dutch*, yet either of them can, by this help of a common character, as well understand the books and letters of the others, as if they were only their own.

Histor. Sinens. lib. 1. cap. 5.

Bacon Augment. Sciet. lib. 6. c. 1. Voss. Gr. li. 1. cap. 41. Herm. Hugo de orig. scrib. c. 4.

And for some particulars, this generall kind of writing is already attained amongst us also.

1 Many Nations doe agree in the characters of the common numbers, describing them, either the *Roman* way by letters; as I. II. V. X. C. D. M. or else the *Barbarian* way by figures, as 1. 2. 3. 10. &c. So likewise for that which we call Philosophicall number, which is any such measure, whereby we judge the differences betwixt severall substances, whether in weight, or length, or capacity: Each of these are exprest in severall languages by the same character. Thus ℈ signifies a Scruple, ʒ a Drachme, and so of the rest.

2 The

2 The Astronomers of severall Countries doe expresse both the heavenly Signes, & Planets, & Aspects by the same kind of notes. As, ♈, ♉, ♊, ♋, &c. ♄, ♃, ♂, ♀, &c. ☌, ✶, △, □, ☍. Which characters (as it is thought) were first invented by the ancient Astrologers for the secrecie of them, the better to conceale their sacred and mysterious profession from vulgar capacitie.

3 The Chymicall Treatises that are written in different languages do all of them agree in the same forme of writing their Minerals. Those that are attributed to any of the Planets are decyphered by the character of the Planet to which they belong. The rest by other particular signes, as △ for Salt Ammoniack, ☍ for Arsnick, &c.

4 Musicall notes in most Countries are the same. Nor is there any reason why there may not be such a generall kinde of writing invented for the expression of every thing else as well as these particulars.

In the contrivance of this there must be

be as many ſeverall characters as there are primitive words. To which purpoſe, the *Hebrew* is the beſt patterne, becauſe that language conſiſts of feweſt Radicalls.

Each of theſe primitives muſt have ſome particular marks to diſtinguiſh the caſes, conjugations, or other neceſſary variations of thoſe derivatives that depend upon it.

In the reading of ſuch a writing, though men of ſeverall Countries ſhould each of them differ in their voices, and pronounce ſeverall words, yet the ſenſe would be ſtill the ſame. As it is in the picture of a man, a horſe, or tree, which to all Nations doe expreſſe the ſame conceit, though each of theſe creatures be ſtyled by ſeverall names, according to the difference of languages.

Suppoſe that Aſtronomicall ſigne ♉ were to be pronounced, a *Jew* would call it שור; A *Grecian* ταῦρος; An *Italian Toro*; A *Frenchman Taureau*; A *German Stier*; An *Engliſhman* a Bull.

So

So likewise for that character, which in *Tyro's* notes, signifies the world, A *Jew* would reade it תבל; A *Grecian* κόσμος; An *Italian*, *il mondo*; A *French man*, *le monde*; A *German*, *Belt*. Though severall Nations may differ in the *expression* of things, yet they all agree in the same *conceit* of them.

The learning of this character will not be more difficult, than the learning of any one Language, because there needs not be more signes for the expression of things, than there is now for the expression of *words*. Amongst those in *China* and *Iapan*, there is said to be about seven or eight thousand.

The perfecting of such an invention were the only way to unite the seventy two Languages of the first confusion: And therefore may very well deserve their endeavours, who have both abilities and leasure for such kinde of Enquiries.

CHAP.

CHAP. 14.

Concerning the third way of secret discoursing, by signes and gestures, which may signifie either

ex { congruo. / placito. }

THe third way of discoursing was by signes and gestures, which (as they are serviceable to this purpose) may be distinguished into such as are significant, either

1 *Ex congruo.*

2 Or, *ex placito.*

1 *Ex congruo*, when there is some naturall resemblance and affinity, betwixt the action done, and the thing to be exprest. Of which kind, are all those outward gestures, whereby not only dumbe creatures, but men also doe expresse their inward passions, whether of joy, anger, feare, &c. For,

Sæpe tacens vocem verbaque vultus habet.

And

And the Wiſeman notes it of the ſcorner, that *hee winketh with his eyes, hee ſpeaketh with his feet, hee teacheth with his fingers.*

Prov.6.13

Of this kinde likewiſe are many religious actions, and circumſtances of divine worſhip, not only amongſt the ancient Heathen; but ſome that were particularly enjoyned the Prieſts and Levits of the old Law, and ſome too, that are now in uſe, in theſe times of the Goſpell. For by ſuch bodily geſtures and ſignes, we may as well ſpeak unto God, as unto men.

To this kind alſo are reducible, thoſe actions of *forme*, that are required as neceſſary circumſtances, in many civill affaires, and publike ſolemnities; which are uſually ſuch, as in themſelves are apt to ſignifie the thing for which they are meant.

But now, ſometimes the intended meaning of theſe geſtures is concealed under a ſecret ſimilitude. As it was in that act of *Thraſybulus*, who being conſulted with, how to mayntain a tyranny,

ny, that was newly usurped: Hee bid the messenger attend him in the field, wherewith his wand he whipt off those higher eares of corne that did overtop the rest; intimating, that it consisted in cutting off the Peeres, and Nobilitie, who were likely to be most impatient of subjection. This I may call a *Parabolicall* way of speaking by Gestures.

2 *Ex placito*, when these signes have their signification from use and mutuall compact; which kind of speaking, as it refers to lascivious intimations, is largely handled by *Ovid. de Arte Amandi*:

Verba superciliis sine voce loquentia dicam,
Verba leges digitis, &c.

By the helpe of this it is common for men of severall Nations, who understand not one anothers Languages, to entertain a mutuall commerce and traffique. And 'tis a strange thing to behold, what Dialogues of gestures

there will passe betwixt such as are borne both deafe and dumb; who are able by this meanes alone, to answer and reply unto one another as directly, as if they had the benefit of speech. 'Tis a great part of the state and Majestie, belonging to the Turkish Emperor, that hee is attended by Mutes, with whom hee may discourse concerning any private businesse, which hee would not have others to understand.

It were a miserable thing, for a rationall soule, to be imprisoned in such a body, as had no way at all to expresse its cogitations: which would be so, in all that are borne deafe, if that which nature denied them, were not in this respect supplied, by a second nature, custome and use.

But (by the way,) 'tis very observable which * *Vallesius* relates of *Pet. Pontius* a friend of us, who by an unheard of art taught the deafe to speak. *Docens primum scribere, res ipsas digito indicando, quæ characteribus illis significarentur;*

* *Sacra Philos. cap.* 3.

rentur; deinde ad motus linguæ, qui characteribus responderent provocando. First learning them to write the name of any thing, hee should point to; and afterwards provoking them to such motions of the tongue as might answer the severall words. 'Tis probable, that this invention, well followed, might be of singular use, for those that stand in need of such helps. Though certainly that was far beyond it, (if true) which is related of an ancient Doctor, *Gabriel Neale*, that he could understand any word by the meere motion of the lips, without any utterance.

The particular wayes of discoursing by gestures, are not to be numbred, as being almost of infinite variety, according as the severall fancies of men shal impose significations, upon all such signes or actions, as are capable of sufficient difference.

But some there are of more especiall note for their use and antiquity. Such is that upon the joynts and fingers of the hand, commonly stiled *Arthrologia*,

or *Dactylologia*, largely treated of by the venerable * *Bede*, * *Pierius*, and others. In whom you may see, how the Ancients were wont to expresse any number, by the severall postures of the hands and fingers; The numbers under a hundred, were denoted by the left hand, and those above, by the right hand. Hence *Iuvenal*, commending *Pylias* for his old age, sayes that hee reckoned his yeeres upon his right hand.

* *Lib. de loquelâ per gestum digitorum sive de indigitatione.*
* *Hieroglyphic. lib. 37. c. 1. & c Calius Antiq. lect. l. 23. cap 12. Satyr. 10.*

Felix nimirum qui tot per sæcula vitam
Distulit, atque suos jam dextra computat annos.

There are divers passages in the ancient Authors, both sacred and profane, which do evidently allude to this kind of reckoning.

Hence it is easie to conceive, how the letters, as well as the numbers, may be thus applyed to the severall parts of the hand, so that a man might with divers touches, make up any sense, that he

hee hath occaſion to diſcover unto a confederate.

This may be performed, either as the numbers are ſet downe, in the Authors before cited, or elſe by any other way of compact that may bee agreed upon.

As for example. Let the tops of the fingers ſignifie the five vowels; the middle parts, the five firſt conſonants; the bottomes of them, the five next conſonants; the ſpaces betwixt the fingers, the foure next. One finger laid on the ſide of the hand may ſignifie T. Two fingers V the conſonant; Three W. The little finger croſſed X. The wriſt Y. The middle of the hand Z.

But becauſe ſuch various geſticulations, as are required to this, will not be without ſuſpition; therefore it were a better way, to impoſe ſignifications, upon ſuch actions as are of more common unſuſpected uſe: As ſcratching of the head, rubbing the ſeverall parts of the face, winking of the eyes, twiſting of the beard, &c. Any of which, or all

all of them together, may be as well contrived to serve for this purpose, and with much more secrecie.

In which art, if our gaming Cheats, and popish Miracle-impostors, were but well versed, it might much advantage them, in their cousening trade of life.

Chap. 15.

Concerning the swiftnesse *of informations, either by* qualities, *as the impression of imagination, and the sensitive species; or by spirituall* substances, *as Angels.*

HAving already treated concerning the severall wayes of *secrecy* in discoursing, I shall in the next place enquire, how a man may with the greatest *swiftnesse* and *speed*, discover his intentions to one that is far distant from him.

There is nothing (wee say) so swift as

as thought, and yet the impression of these in another, might be as quick almost as the first act, if there were but such a great power in imagination, as some later * Philosophers have attributed to it.

* *Marsil. Ficin. Theolog. Platon. lib. 3. cap. 1. Pomponatius de Incantat. Paracelsus.*

Next to the acts of thought, the species of sight, doe seeme to be of the quickest motion. Wee see the light of the East will in a moment fill the Hemisphere, and the eye does presently discerne an object that is very remote. How we may by this means communicate our thoughts at great distances, I shall discourse afterwards.

The Substances that are most considerable for the swiftnesse of their motion, are either

Spirituall.
Corporeall.

Amongst all created substances, there are not any of so swift a motion as Angels or Spirits. Because there is not either within their natures, any such indisposition and reluctancie, or without them in the medium, any such impedi-

Spirits.

pediment as may, in the least manner retarde their courses. And therefore have the ancient Philosophers imployed these as the causes of that mad celerity, of the celestiall Orbs; though according to their suppositions I thinke it would bee a hard match, if there were a race to be run, betwixt the *Primum mobile*, and an Angell. It being granted that neither of them could move in an instant, it would be but an even lay, which should prove the swifter.

From the fitnesse of spirits in this regard, to convey any message, are they in the learned Languages called Messengers.

מלאך
ἄγγελος
Angelus.

Now if a man had but such familiaritie with one of these, as *Socrates* is said to have with his Tutelary *Genius*: If wee could send but one of them upon any errand, there would bee no quicker way then this for the dispatch of businesse at all distances.

Plutarch. Maximus Tyrius. Dissertat. 26, 27.

That they have been often thus imployed, is affirmed by divers relations.

Vari.

Vatinius being in *Rome*, was informed by an apparition, of that victory which *Paulus* their Generall had obtained over King *Perses* in *Macedon*, the very same day wherein the battaile was fought; which was a long time before any other Messenger could arrive with the new.

Lactant. Inst. lib. 2. cap. 8. Val. Max. lib. 1. c. 8. Florus lib. 2 cap. 12.

And it is storied of many others, that whilst they have resided in remote Countries, they have known the death of their friends, even in the very houre of their departure: Either by bleeding, or by dreams, or some such way of intimation. Which, though it be commonly attributed to the operation of sympathy; yet it is more probably to be ascribed unto the Spirit or Genius. There being a more especiall acquaintance and commerce, betwixt the Tutelary Angels of particular friends, they are sometimes by them informed (though at great distances) of such remarkable accidents as befall one another.

But this way, there is little hopes to ad-

advantage our enquiry, because it is not so easie to imploy a good Angell, nor safe dealing with a bad one.

The Abbot *Trithemius*, in his books, concerning the severall ways of secret and speedy discoursing, does pretend to handle the forms of conjuration, calling each kinde of character by the name of spirits, thereby to deterre the vulgar from searching into his Works. But under this pretence, hee is thought also to deliver some Diabolicall Magick. Especially in one place, where he speaks of the three Saturnine Angels, and certain Images, by which, in the space of twenty foure houres, a man may bee informed of newes from any part of the World. And this was the maine reason, why by *Junius* his advice, *Frederick* the second, Prince Palatine, did cause the originall Manuscript of that worke to bee burned. Which action is so much (though it should seem, unjustly) blamed by *Selenus*.

Vossius Gram. lib. 1 cap. 41.

Polygraph. lib. 3. c. 16.

Cryptogra. l. 3. cap. 35.

CHAP.

CHAP. 16.

Concerning the swiftnesse of conveyance by bodies, *whether* inanimate, *as Arrows, Bullets*; *or* animate, *as Men, Beasts, Birds.*

THe *bodies* that are most eminent for their swiftnesse, may be distinguished into such as are

either { inanimate. / animate.

Inanimate bodies.

These inanimate bodies, as Arrows, Bullets, &c. have only a violent motion, which cannot therefore be continued to so great a distance, as some occasions would require: But for so much space as they doe move, they are far swifter then the naturall motion of any animated body. How these have been contrived to the speedy conveyance of secret messages, hath been formerly

merly discoursed, in the fourth Chapter, which I now forbeare to repeat.

Those living bodies, that are most observable for their speed, and celerity in messages: are either Men, Beast, Birds. Though I doubt not, but that Fishes also may be serviceable for this purpose, especially the Dolphin, which is reported to be of the greatest swiftnesse; and most easily cicurated, or made tame.

Men. Amongst the ancient Footmen, there are some upon record for their incredible swiftnesse. *Ladas* is reported to be so quick in his running: *Vt arenis pendentibus & cavo pulvere, nulla indicia relinqueret vestigiorum*, that hee left no impression of his footsteps on the hollow sands. And it is related of a boy amongst the *Romans*, being but eight yeares old, that did run five and forty mile in an afternoone. *Anistius* and *Philonides*, two footmen unto *Alexander* the great, are said to have run 1:00 *stadia* in a day. Which relations will seeme lesse incredible, if wee consider the

Solinus. Polybist. c.6.

Ibid.

the ancient Exercises and Games of this kind, together with the publicke fame and rewards for those that were most eminent.

Swiftnesse of Beasts. Exer. 205.

Amongst the variety of beasts, there are some of more especiall note for their strength and swiftnesse. *Scaliger* mentions a story, (though hee distrust the truth of it) of a certaine beast called *Ellend*, two of which being joyned in a little cart, are said to passe three hundred leagues a day upon the ice.

In former ages, and in other Countries, the Dromedary, and Camell, and Mule were of more common use: But in these times and places, the horse (for the most part) serves instead of them all; by the helpe of which, wee have our swiftest meanes of ordinary conveyance. The custome of riding post, by renewing both horse and man at set stages, is of ancient invention. *Herodotus* relates it to be used by *Xerxes* in the *Græcian* war, and that it was by the *Persians* called ἀγγαρήιον. The particulars that concerne these kind of conveyan- Lib. 8 98.

ces

ces amongst the Ancients, are largely handled by *Hermannus Hugo lib. de origine scribendi, cap.* 14.

Nat. Hist. l.8. cap.42. *Pliny* tels us of certain Mares in *Lusitania*, which doe conceive meerly by the Westwind; that alone (without the copulation of any male) serving to actuate their heat, and to generate their young. Which are likewise mentioned by *Virgil.*

Georg.3.

Exceptantq; auras leves, & sæpe sine ullis
Conjugiis, vento gravidæ, &c.

Mee thinkes, these children of the wind, should for their fleetnesse, make excellent post-horses, and much conduce to the speedy conveyance of any message.

The *Paracelsians* talke, of naturall means to extract the metall and spirit out of one horse, and infuse it into another, of enabling them to carry a man safely and swiftly, through enemies, precipices, or other dangerous place. And such Horses (say they) were used by

by the Wiſemen of the Eaſt at our Saviours Nativity : for they had not otherwiſe beene able to have kept pace with a ſtar, or to have paſſed ſo great a journey as it was to *Jeruſalem*, which is thought to be five or ſix hundred miles at the leaſt, from the places of their habitation. If this conceit were feaſible, it would much promote the ſpeed of conveyances, but I thinke it may juſtly bee referred amongſt the other dreames of the Melancholicke Chymicks.

The ſwiftneſſe of Birds.

Amongſt all animate bodies there is not any, that have naturally ſo ſwift a motion as birds. Which if a man could well imploy in the diſpatch of any errand, there would bebut little fear that ſuch meſſengers ſhould be either intercepted, or corrupted.

That this hath been attempted, and effected by many of the Ancients, is affirmed by divers relations. *Pliny* tels us of *Volaterranus*, that hee diſcovered a conqueſt hee had gotten, unto the City of *Rome*, by ſending out ſwallows, which

Nat. Hiſt. lib. 10. c. 24.

which should fly thither, being anointed over with the colour of victory. And of another, who sending one of these Birds into a besieged City, (whence shee was before taken from her young ones) and tying a string unto her with certaine knots upon it, did thereby shew, after what number of dayes their aids would come, at which time they should make an irruption upon the enemy.

Cap.37. And elswhere in the same booke, he relates, how *Hircius* the Consul, and *Brutus*, who was besieged in *Mutina*, did this way mayntaine mutuall intelligence, by tying their Letters unto such Pigeons, as were taught before hand to fly from the tents to the Citie, and from thence to the Tents again.

Histor. Animalium, l.6 cap 7. How *Thaurosthenes* did by this means send the news of his victory at *Olympia*, to his Father at *Ægina*, is related by *Ælian*.

Anacreon has an Ode, upon such a Pigeon, which hee himselfe had often used

used as a Messenger, wherein the Bird is fained to say,

Ἐγὼ δ' Ἀναπλάσας
Διακονῶ τοσοῦτα
Καὶ τοῖς ἐρᾷν ἐκείνοις
Ἐπιστολὰς κομίζω.

Uuto this invention also, *Juvenal* is thought to allude, where he sayes, *Satyr.4. juxta finem.*

---tanquam è diversis partibus orbis,
Anxia præcipiti venisset epistola pennâ.

Lypsius relates out of *Varro*, that it was usuall for the *Roman* Magistrates, when they went unto the Theater, or other such publike meetings, whence they could not returne at pleasure, to carry such a Pigeon with them: that if any unexpected businesse should happen, they might thereby give warning to their friends, or families at home. *Saturn. Serm. lib.2 cap.6*

By which relations, you may see, how commonly this invention was practised amongst the Ancients. Nor hath it beene lesse used in these later

times, especially in those Countries, where by reason of continuall wars, and dissentions, there have beene more particular and urgent necessity for such kind of conveyances. *Nunc vulgatissima res est, columbas habere, ad ejusmodi jussa paratus*, saith *Casaubon*. *Harum opere, nostrates hoc bello civili, frequenter adjuti sunt*, saith *Godesc. Stewechius*.

Not. in Æneæ. Poliorcet. cap. 31.

Comment. in Veget. L. 3. c. 5.

There are divers other stories to this purpose, but by these you may sufficiently discern the common practices of this kinde. As it is usuall to bring up birds of prey, as Hawks, Cormorants, &c. to an obedience of their keepers: So likewise have some attempted it in these other Birds, teaching them the art of carrying messages. There is a smaller sort of Pigeons, of a light body, and swift flight, which is usually made choice of for such particulars; And therefore the kinde of them is commonly called by the name of Carriers.

See *Nunt. Inanimat.* concerning *Aimaldus. Porta de fiert. lit. li. 2 cap. 11.* concerning Marches. *Herm. Hugo. de Orig. scribendi cap. 15. Thuanus Hist. lib. 17*

CHAP.

CHAP. 17.

Of secret and swift informations by the species of sound.

HAving in the former Chapters treated severally concerning the divers wayes of secrecy and swiftnesse in discourse; It remaynes that I now enquire (according to the method proposed) how both these may be joyned together in the conveyance of any message. The resolution of which, so far as it concernes the particulars already specified, were but needlesse to repeat.

That, which does more immediatly belong to the present *Quære*, and was the mayne occasion of this discourse, does refer to other ways of intimation, besides these in ordinary use, of speaking, or writing, or gestures. For in the generall wee must note: That *whatever is capable of a competent difference, perceptible to any sense, may be a suf-*

ficient means, whereby to expresse the cogitations. It is more convenient indeed, that these differences should be of as great varietie, as the letters of the Alphabet; but it is sufficient if they bee but twofold, because two alone, may with somewhat more labour and time, bee well enough contrived to expresse all the rest. Thus any two letters or numbers, suppose A. B. being transposed through five places, will yield thirty two differences, & so consequently, will superaboundantly serve for the foure and twenty Letters, as was before more largely explained in the ninth chapter.

Now the sensitive species, whereby such informations must be conveyed, are either the species of *sound*, or the species of *sight*. The eare and the eye, being the only sences, that are of quick perception, when their objects are remote.

De re militari, lib. 3. cap. 5.

Vegetius distinguisheth all significatorie signes into these three sorts.

1 *Vo-*

1 *Vocalia.* By articulate ſounds.
2 *Semivocalia.* By inarticulate ſounds.
3 *Muta.* By the ſpecies of ſight.

The two laſt of theſe are chiefly pertinent to the preſent enquiry. Concerning which, in the generall it may be concluded, that any ſound, whether of Trumpets, Bels, Cannons, Drums, &c. or any object of ſight, whether flame, ſmoake, &c. which is capable of a double difference, may be a ſufficient meanes, whereby to communicate the thoughts.

The particular application of theſe, to ſome experiments, I ſhall treat more diſtinctly in the remaynder of this diſcourſe.

Secret and ſpeedy information by the ſpecies of ſound.

Firſt, concerning the ſecrecy and ſwiftneſſe of any meſſage by the ſpecies of ſound. Though theſe audible ſpecies be much ſlower then thoſe of ſight; yet are they far ſwifter then the naturall motion of any corporeall meſſenger. The chiefe uſe of theſe is for

such as are within some competent neernes, as perhaps a mile of. But they may also by frequent multiplications, be continued to a far greater distance.

Proem. in lib. Plutar. de defectu oraculorum.

There is a relation in *Joach. Camerarius*, of some that have heard their friends speaking to them distinctly, when they have been many miles asunder. *Habui notos homines, neque leves, & non indoctos, qui affirmabant, se audiisse secum colloquentes diserte, eos quos tunc multorum millium passuum abesse certo sciebant.* But this hee justly refers to Diabolicall Magick, and the illusion of spirits.

There are other *naturall* experiments in this kind, of more especiall note for their antiquity. Such was that of King *Xerxes*, related by *Cleomenes*, as he is cited by *Sardus.* Cleomedes *in libro de circulis cœlestibus scribit* Xerxem *toto itinere a* Perside *in* Græciam *stationes statuisse, & in iis homines ita prope, ut vocem alterius alter exaudiret; quo modo quadraginta horarum spatio, ex* Græciâ *in* Persidem *res nunciari poterat.* But this in-

De rerum Inventor. lib. 2.

invention, besides the great trouble and uncertainty of it, is also too grosse for imitation, savouring somewhat of the rudenes of those former and more barbarous ages.

Much beyond it was that experiment of the *Romans*, in the contrivance of the *Picts* wall, related by our learned *Cambden*, this wall was built by *Severus* in the North part of *England*, above a hundred miles long. The towers of it were about a mile distant from one another. Betwixt each of these towers there passed certaine hollow pipes or trunks in the curtaines of the wall, through which the Defendants could presently informe one another of any thing that was necessary. As concerning that place wherein the enemy was most likely to assault them, &c.

Britan. de Vallo sive the *Picts Wall. p 654 Boter. Geog. l. 2. & lib. 4* where hee mentions also another wall of 8000 furlongs in *China*.

Since the wall is ruined, and this means of swift advertisement taken away, there are many inhabitants thereabouts, which hold their Land by a tenure in *Cornage* (as the Lawyers speak) being bound by blowing of a

Home to discover the irruption of the enemy.

There is another experiment to this purpose mentioned by *Walchius*, who thinks it possible so to contrive a trunk or hollow pipe, that it shall preserve the voice entirely for certain houres or days; so that a man may send his *words* to a friend instead of his *writing*. There being always a certaine space of intermission; for the passage of the voice, betwixt its going into these cavities, and its comming out; hee conceives, that if both ends were seasonably stopped, whilst the sound was in the midst, it would continue there till it had some vent. *Huic tubo verba nostra insusurremus, & cum probe munitur tabellario committamus, &c.* When the friend to whom it is sent, shall receive and open it, the words shall come out distinctly, and in the same order wherein they were spoken. From such a contrivance as this, (saith the same Authour) did *Albertus Magnus* make his Image, and Frier *Bacon*, his brazen Head, to utter certaine words.

Fabul. 9.

words. Which conceit (if it have any truth) may serve somewhat to extenuate the grosse absurdity of that popish relique concerning *Josephs* [Hah] or the noise that hee made (as other Carpenters use) in fetching of a blow: which is said, to be preserved, yet in a glasse amongst other ancient Reliques.

But against these fancies it is considerable, that the species of sound are multiplyed in the ayre, by a kinde of continuation and efflux from their first originall, as the species of light are from any luminous body; either of which being once separated from their causes doe presently vanish and die. Now as it would be a mad thing for a man to endeavour, to catch the Sunbeams. or inclose the light; upon the same grounds likewise must it needs be absurd, for any one to attempt the shutting in of articulate sounds: Since both of them equally have the same intrinsicall and inseparable dependance upon their efficient causes.

True, indeed, the species of sound may

may seeme to have some kinde of selfe continuance in the ayre, as in Ecchoes, but so likewise is it in a proportion with those of sight, as in the quick turning round of a fire-sticke, which will make the appearance of a fiery circle: And though the first kinde of these be more lasting then the other, by reason their naturall motion is not so quick, yet neither of them are of such duration as may be sufficient for the present enquiry.

None of all these inventions already specified, doe sufficiently performe the businesse, that is here enquired after: Nor are they, either so generally or safely, appliable for all places and exigences.

The discovery that is here promised, may be further serviceable for such cases as these.

Suppose a friend were perfidiously clapped up in some close Dungeon, and that wee did not know exactly where, but could only guesse at the place, within the latitude of halfe a mile or some-

ſomewhat more: A man might very diſtinctly by theſe other inventions diſcourſe unto him. Or ſuppoſe a Citie were ſtraitly beſieged, and there were either within it or without it, ſuch a confederate, with whom wee ſhould neceſſarily confer about ſome deſigne: We may by theſe means ſafely diſcover to him our intentions. By which you may gueſſe, that the Meſſenger which is here imployed, is of ſo ſtrange a nature, as not to be barred out with walls, or deterred by enemies.

To the performance of this, it is requiſite, that there be two Bels of different notes, or ſome ſuch other audible and loude ſounds, which we may command at pleaſure; as Muskets, Canons, Horns, Drums, &c. By the various ſounding of theſe (according to the former Table) a man may eaſily expreſſe any letter, and ſo conſequently any ſenſe. *cap. 9.*

Theſe Tables, I ſhall again repeat in this place. That of two letters may be contrived thus.

A.

A.	B.	C.	D.	E.
aaaaa.	aaaab.	aaaba.	aaabb.	aabaa.
F.	G.	H.	I.	K.
aabab.	aabba.	aabbb.	abaaa.	abaab.
L.	M.	N.	O.	P.
ababa.	ababb.	abbaa.	abbab.	abbba.
Q.	R.	S.	T.	V.
abbbb.	baaaa.	baaab.	baaba.	baabb.
W.	X.	Y.	Z.	
babaa.	babab.	babba.	babbb.	

Suppoſe the word *Victuals*, were this this way to be expreſt. Let the bigger ſound be repreſented by A. and the leſſer by B. according to which, the word may be thus made up by five of theſe ſounds for each letter.

V.	I.	C.	T.	V.
baabb.	abaaa.	aaaba.	baaba.	baabb.
A.	L.	S.		
aaaaa.	ababa.	baaab.		

That is, the leſſer note ſounded once, and then the bigger twice, and then again the leſſer twice, as (baabb) will

ſigni-

ſignifie the letter (Y). So, the bigger once, and then the leſſer once, and after that the bigger thrice together, as (abaaa) will repreſent the letter (I:) and ſo of the reſt.

If the ſounds be capable of a triple difference, then each letter may be expreſſed by a threefold ſound, as may appeare by this other Alphabet.

A.	B.	C.	D.	E.	F.	G.	H.
aaa.	aab.	aac.	baa.	bab.	bba.	bbb.	bbc.
I.	K.	L.	M.	N.	O.	P.	Q.
caa.	cba.	cbb.	cbc.	cca.	ccb.	ccc.	aba.
R.	S.	T.	V.	W.	X.	Y.	Z.
abb.	abc.	aca.	acb.	acc.	bca.	bcb.	bcc.

V.	I.	C.	T.	V.	A.	L.	S.
acb.	caa.	aac.	aca.	acb.	aaa.	cbb.	abc.

If theſe ſounds do contain a quintuple difference, then may every letter be ſignified by two ſounds only, (which will much conduce to the ſpeed and diſpatch of ſuch a meſſage.) As you may ſee in this other Table.

An

A. B. C. D. E. F. G. H. I. K. L. M.
aa. ab. ac. ad. ae. ba. bb. bc. bd. be. ca. cb.
N. O. P. Q. R. S. T. V. W. X. Y. Z.
cc. cd. ce. da. db. dc. dd. de. ea. eb. ec. ed.

V. I. C. T. V. A. L. S.
de. bd. ac. dd. de. aa. ca. dc.

De fort. lit. lib. 1. cap. 6.

Tis related by *Porta*, that when the Citizens in the siege of *Navarre* were reduced to such great extremities that they were ready to yield; they did discover to their friends the greatnesse, and kind of their wants, by discharging divers Canons and Ordinances in the night time, according to a certaine order before agreed upon: and by this means did obtain such fitting supplyes as preserved the City.

CHAP.

CHAP. 18.

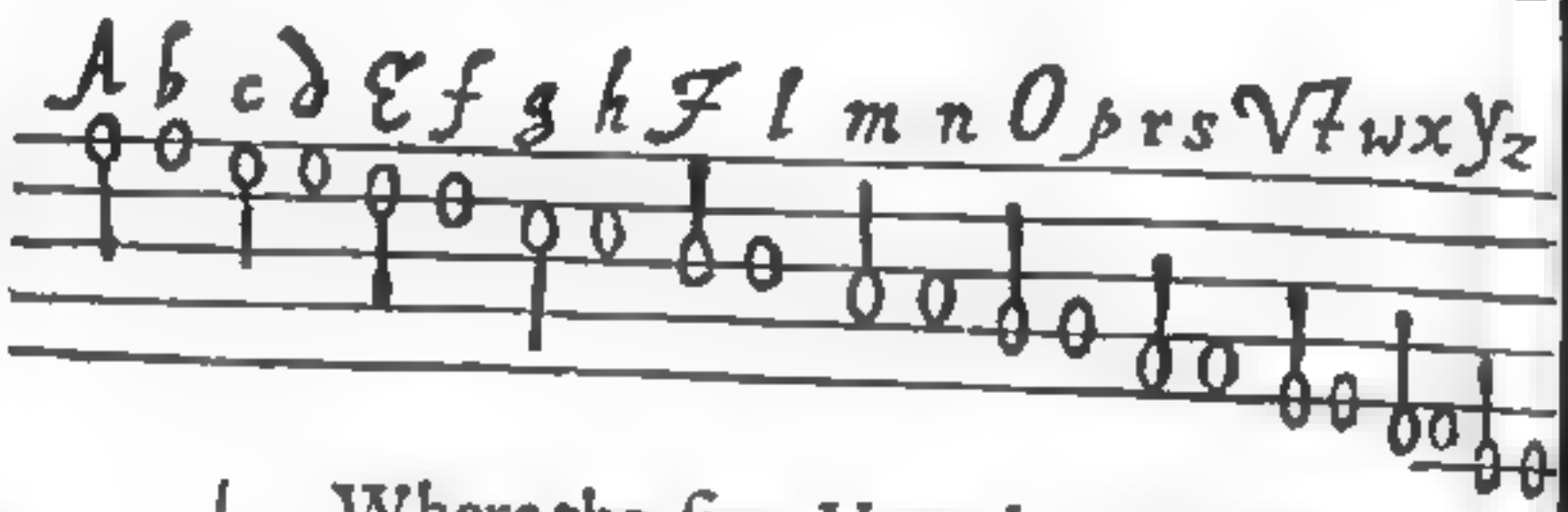
Concerning a language, that may consist only of Tunes and Musicall Notes, without any articulate sound.

IF the Musicall Instrument that is used to this purpose, be able to expresse the ordinary notes, not only according to their different *Tones*, but their *Times* also; then may each Letter of the Alphabet be rendred by a single sound.

Whence it will follow that a man may frame a Language, consisting only of Tunes and such inarticulate sounds, as no Letters can expresse. Which kind of speech is fancied to bee usuall amongst the Lunary Inhabitants; who (as * *Domingo Gonsales* hath discovered) have contrived the Letters of the Alphabet upon the Notes after some such order as this:

* Or the man in the Moon, written by the same Authour of *Nuntius Inanimat.*

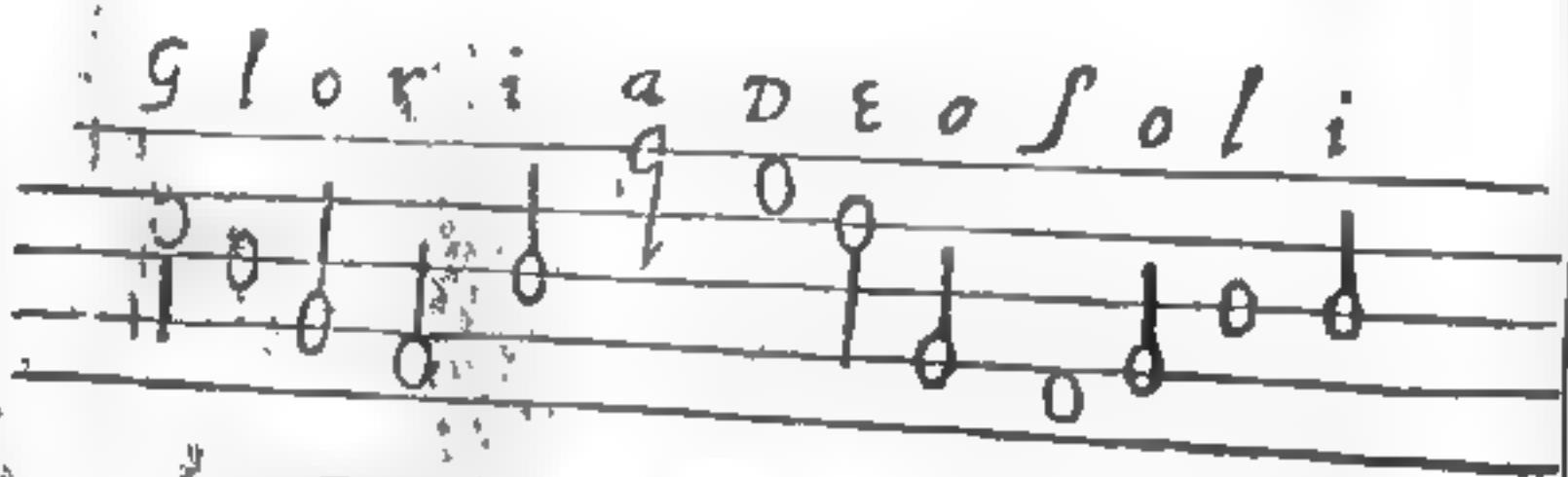
Where



Where the five Vowels are repreſented by the Minnums on each of the five lines, being moſt of them placed according to their right order and conſequence: only the letters K. and Q. are left out, becauſe they may be otherwiſe expreſſed.

See Dom. Gonſal. 94

According to this Alphabet of Notes, theſe words, *Gloria Deo ſoli*, muſt be thus contrived.



By this you may eaſily diſcern how two Muſicians may diſcourſe with one another, by playing upon their Inſtruments

ments of *Musique*, as well as by talking with their instruments of *speech*. And (which is a singular curiosity) how the words of a Song may be contrived in the tune of it.

I suppose that these letters and notes might be disposed to answer one another, with better advantage then here they are expressed. And this perhaps, would bee easie enough for those that are thoroughly versed in the grounds of Musique, unto whose further enquiry, I doe here only propose this invention.

But now if these inarticulate sounds be contrived for the expression, not of *words* and *letters*, but of *things* and *notions*, (as was before explained, concerning the universall Character) then might there bee such a generall Language, as should be equally speakable, by all people and Nations; and so we might be restored from the second generall curse, which is yet manifested, not only in the confusion of *writing*, but also of *speech*.

The *uttterance* of theſe Muſicall tunes may ſerve for the univerſall *language*, and the *writing* of them for the univerſall *Character*. As all Nations do agree in the ſame conceit of things, ſo likewiſe in the ſame conceit of Harmonies.

This Curioſity (for ought I know) has not yet beene mentioned by any Author, but it may be (if well conſidered) of ſuch excellent uſe, as to deſerve a more full and particular enlargement, in a Treatiſe by it ſelfe.

CHAP.

CHAP. 19.

Of those common relations, that concerne secret and swift informations by the species of sight, which are either Fabulous, *or* Magicall.

THe usuall relations, that concerne secret and swift conveyances by the species of sight, may be distinguished into such as are, either

1 Fabulous.
2 Magicall.
3 Naturall and true.

First of those that are fabulous: In which kind, that of the loadstone is most remarkable, as it is maintained by * *Famianus Strada* in his imitation of *Lucretius* his stile, and divers others. The manner that is usually prescribed for the performance of it, is thus. Let there be two needles provided, of an equall length and bignesse, being both of them touched with the same loadstone. Let the letters of the Alphabet be placed in the circles on which they

1 Of those fabulous relations to this purpose.

* *Lib. 2. prolus. 6.*

are moved, as the points of the compasse under the needle of the Mariners Chart. Let the friend that is to travaile take one of them with him, first agreeing upon the dayes and houres, wherein they should conferre together: At which times, if one of them move the needle of his instrument to any letter of the Alphabet, the other needle by a Sympathie, will move unto the same letter in the other instrument, though they be never so farre distant. And thus by severall motions of the needle to the letters, they may easily make up any words or sense which they have a mind to expresse.

O utinam hæc ratio scribendi prodeat usu;
Cautior & citior properaret epistola, nullas
Latronũ veritas insidias, fluviosq; morantes,
Ipse suis princeps manibus sibi conficeret rem, &c.

Saith *Strada*. But this invention is altogether imaginary, having no foundation in any reall experiment. You may see it frequently confuted, in those that treat concerning magneticall

call vertues. *Non solum exibilandi sunt, sed etiam male mulctandi Philosophicâ ferulâ, fabularum isti procusores, qui suis portentis deterrent homines à præclarissimo causarum studio*, saith *Cabæus*, to this purpose.

Philosop. Magnet. l.b.4.c.10.

The first occasion of these relations, was the proofe of that strange immateriall powers of the loadstone, whereby it did work through thick and solid bodies, as a table, or wall, or the like: as also of that directive vertue, whereby it alwayes tends to the poles; From whence others have conjectured, that it might be serviceable also, for such a businesse, at so great a distance.

But against this, it is considerable,

1 That every naturall agent, is supposed to have some certaine sphere, which determines its activity.

2 That magneticall operations doe not arise (as some fondly conceive) from a Sympatheticall conformation of natures, which is the same at all distances; but from such a diffusion of these magneticall qualities through

the *medium*, that they may be continued from the agent to the patient. And so these naturall powers, will not be of so great an extent, as they are supposed in this experiment.

The utmost distance, at which wee may discourse with another, by these magneticall vertues, is two or three foot or there abouts; And this wee may doe, though it be through a wall of that thicknesse. *Fieri enim posse me docuit experientia, ut ope Magnetis, & instrumenti ad id aptati, amicus cum amico, in cubiculo proximo, trans crassum murum (puta bipedalem) colloquatur, animi sui sententiam impertiat, & ad quæsita respondeat,* (saith a late Author.) But in this experiment, it is not only the secondary vertue of the needles that can be thus effectuall (as is supposed in the former invention) but there must be the help also of the loadstone it selfe.

S. *Ward. magnetis Reduct. cap.* 40. See *Cabeus Phil. Magn. lib.* 4. *c.* 11.

As for the reason why these magneticall powers are able to worke through solid bodies; 'Tis considerable, that any quality may be diffused through

through ſuch a ſubſtance, as hath no naturall repugnancie unto it. Wee ſee the light does paſſe as wel through hot bodies as cold, through ſolid as fluid, &c. only Opacitie keeps it out; becauſe that quality alone is contrary to its nature. So likewiſe is it with magneticall vertues, which doe equally ſpread themſelves, through all kind of bodies, whether *rare* or *denſe*, *diaphanous* or *opacous*, there being no quality contrary to this; becauſe it is that generall endowment of the whole globe, that univerſall quality to which all other particulars are naturally ſubſervient.

The ſecond ſort of relations to this purpoſe, are ſuch as referre to *diabolicall Magick*; Of which kind is that invention thought to be, which is commonly aſcribed to *Pythagoras*; of whom it is reported, that hee could write any thing in the body of the Moone, ſo as it might be legible to another at a great diſtance. *Agrippa* affirmes this to be naturally poſſible, and the way of performing it, not unknown to himſelfe,

2 Magicall.

Occult. Philſ. lib. 1. cap. 6.

selfe, with some others in his time. And *Fridericus Risner* seemes to beleeve it. For speaking of the strange experiments to be wrought by some glasses, he adds. ***Denique certo artificio, depictas imagines, aut scriptas literas, nocte serenâ, plenæ lunæ sic opponi possunt, ut radiis lunam irradiantibus, ideoq; reflexis, videas & legas, quæ Constantinopoli Lutetiam tibi nuncientur.***

Optic. l. b. 3. prop. 36. Speculorum persuasio huc pervasit, &c.

There is an experiment in Opticks to represent any writing by the sunbeams, upon a wall or front of a house: For which purpose, the letters must be first described, with wax or some other opacous colour, upon the surface of the glasse, in an inverted forme; which glasse, afterwards reflecting the light upon any wall in the shade, will discover these letters in their right forme and order. Unto some such invention, I did first (before I had well considered these particulars) attribute the performance of those strange promises in *Nunius inanimatus*. But upon better thoughts, it will be found, that the

World in the Moon. cap. 7.

the ſpecies of reflexion, in this experiment, are ſo weake, that unleſſe the glaſſe and the letters be very bigge, and the wall ſomwhat neere, there will be no diſtinct appearance of the writing. And therefore this way, there can be no thoughts of contriving any reflected ſpecies, that ſhall be viſible at ſo great a diſtance as the Moone. Nor is there any other naturall means conceiveable, by which ſo ſtrange an effect may be performed, which is the reaſon that it is ſo frequently attributed to diabolicall Magick, by almoſt all the Writers that have occaſion to treat of it.

But *Agrippa* in another place ſpeaking concerning this invention, affirmes that it was performed thus. *Pythagoras* did firſt deſcribe with blood any letters which hee thought fit, in ſome great glaſſe, and then oppoſing the glaſſe againſt the full Moone, the letters would appeare thorough it, as if they were writ in the circumference of her body. *Quæ collibuiſſet ſanguine perſcripſit*

Agrippa de Vanit. Scient. cap. 48.

scripsit in speculo, quo, ad pleni luminis lunæ orbem obverso, stanti à tergo, res exaratas in disco lunæ commonstravit. In which passage he seemes to intimate, that this writing in the Moone, could not be visible at any great distance (as it is related in common tradition,) but that it did appeare to such onely, betwixt whose eyes and the Moone, this glasse might be interposed. And according to this the wonder of the relation ceases, nor may it truly be referred to Diabolicall Magick.

Joach. Camerar. Proem. in lib. Plutarc. de defect. Orac.

More properly reducible to this kind, are those inchaunted glasses, mentioned in divers Authors: In which some Magitians are said to containe such familiar spirits, as doe informe them of any businesse they shall enquire after. I have heard a great pretender to the knowledge of all secret Arts, confidently affirme, that he himselfe was able at that time, or any other, to shew me in a glasse what was done in any part of the world, what ships were sailing in the *Mediterranean*, who

who were walking in any ſtreet of any Citie in *Spaine*, or the like. And this hee did averre, with all the laboured expreſſions of a ſtrong confidence. The man, for his condition, was an Italian Doctor of Phyſick: for his parts, hee was knowne to be of extraordinary skill, in the abſtruſer Arts, but not altogether free from the ſuſpition of this unlawfull Magick.

CHAP.

CHAP. 20.

Of informations by significatory fires and smokes. Their antiquity. The true manner of using them to this purpose. That these were meant in Nuntius inanimatus.

THe experiments of this kind that are true, & upon naturall grounds, have beene made either by fire in the night, or smoke and such other signes visible at a distance in the day time.

These informations by significatory fires, have beene of ancient use. The first invention of them is commonly ascribed to *Sinon* in the Trojan warres. *Specularem significationem Trojano bello Sinon invenit* (saith *Pliny*.) This was the signe upon which he agreed to unlock the wooden horse.

Nat. Hist. lib. 7. c. 56.

Virgil.

——— *Flammas cum regia puppis Extulerat.*———

But *Diodorus Siculus* affirmes them to be practised by *Medea* in her conspiracie with *Jason*. And they are frequently mentioned

Bibliother. lib. 4.

mentioned in other ancient Historians. * *Herodotus* speaks of them in the Grecian warre against *Xerxes*. And * *Thucydides* testifies of them in the onsets that were made by the *Peloponnesians* against *Salamis*, and in the siege of *Corcyra*. *Appian* speaking of *Scipio* at *Numantia*, how he divided his campe into divers companies, saies that he assigned each of them to severall tribunes, with this charge. *Si impeterentur ab hoste, de die,* * *panno rubro in hasta sublato significarent, de nocte, igne.* If the enemie did charge any of them, they should signifie it to the others, in the day time by holding up a red cloth, in the night by fires. *Vegetius* affirmes it to be usuall, when the Army was divided, to informe one another, in the day by smoke, in the night by fires. These significatory fires were by the Grecians called [illegible] (saith *Suidas*) and somtimes [illegible]. The use of them was chiefly for the answer of some particular Quære, that was before agreed upon: As concerning the comming of aydes or

* *Polymn. lib. 7. cap. 182.*
* *Hist. lib. 2*
Item lib. 3.
So *Curtius* of *Alex. M. lib. 5.*
* To this purpose the flags of truce or defiance.
De re militar. lib. 3. cap. 5.
Lipsi. de milit. Roman. lib. 5. Dialog 9.
Æneas Poliorcet. c. 31.

or enemies: if the enemies were comming, they were wont to ſhake theſe torches; if the aydes, they held them ſtill (ſaith the *Scholiaſt* upon *Thucydides*.)

Schol. in lib. 2. Thucyd.

But they have by more exact inventions, beene enlarged to a greater latitude of ſignification. So that now, any thing which wee have occaſion to diſcover, may be expreſſed by them.

Wecker de Secretis. lib. 14. cap. 1. Port. de fort. lit. lib. 1. cap. 10. Cardan. de Variet. Rerum. lib. 12. cap. 61.

The wayes by which they may be contrived to this purpoſe, are divers. I ſhall ſpecifie only the chiefe of them.

That which in ancient times was uſed by the Grecians, and is particularly treated of in * *Polybius*, adviſeth thus.

** Hiſtor. lib. 10. juxta finem.*

Let the letters be divided into five tablets or columnes.

By ten torches.

	I	II	III	IV	V
1	a	f	l	q	w
2	b	g	m	r	x
3	c	h	n	s	y
4	d	i	o	t	z
5	e	k	p	u	

Let

Let there be provided ten Torches; five being placed on the right hand, and five on the left. Let so many torches be lifted up on the right hand as may shew the number of the table, and so many on the left, as may shew the number of that letter in it, which you would expresse. As in this following example, wherein the severall numbers, both at the right and left hand, doe signifie the word HASTEN.

The right hand.		The left hand.
II	H	3
I	A	1
IV	S	3
IV	T	4
I	E	5
III	N	3

That is, two lights being lifted upon the right hand, shew the second columne; and at the same time three torches appearing on the left hand, denotes

notes the third letter in that columne, which is *H*. Thus a single torch being discovered on both sides, doth signifie the first letter of the first columne, which is *A*, and so of the rest.

By 3 Torches. *Lib. de Experientia.*

There is another way mentioned by *Joachimus Fortius*, unto the performance of which, there are onely three lights required. One torch being shewed alone, shall signifie the eight first letters. *A.B.C.D.E.F.G.H.* Two together, the eight next, *I.K.L.M.N.O.P.Q.* And all three the rest. *R.S.T.V.W.X.Y.Z.*

One light being discovered once, signifies *A*. If twice, *B*. Two lights being shewed once, doe denote the letter *I*; if twice, *K*,&c.

According to this way, if I would expresse the word FAMINE: the torches must bee contrived. One light must be lifted up six times for the letter *F*. One light once for *A*. Two lights foure times for *M*. Two lights once for *I*. Two lights five times for *N*.

But

But here it will be requisite, that there be some intermission, betwixt the expression of severall letters; because otherwise there must needs be a great confusion, amongst those that belong to the same number of Torches. In which respect, this way is much more tedious, and inconvenient, then the former invention out of *Polybius*.

It is easie to conceive, how by the Alphabet consisting of two letters transposed through five places, such a manner of discoursing may be otherwise contrived, only by two torches. But then there must be five shewes, to expresse every letter.

By two torches.

There is another way of speaking, by the differences of motion in two lights; which for its quicknesse and speed is much to be preferred before any of the rest. The manner of it is thus: Provide two torches on long poles: Let them be placed so farre from one another, that they may

seeme unto your confederate to be about foure cubits distance. By the divers elevations or depressions of these, enclining of them to the right hand, or to the left, severally or both together, it is easie to expresse all the Alphabet.

One light alone being discovered, must stand for *A*. lifted up for *E*. depressed for *I*. enclined to the right hand for *O*. unto the left hand for *V*.

Two lights elevated, for *B* : depressed for *C* : enclined to the right hand for *D*. to the left hand for *F*.

Two lights being still discovered, and the torch at the right hand being lifted up, shall signifie *G*. Being depressed, *H*. Inclined to the right hand, *K*. To the left hand, *L*.

The torch at the left hand, being elevated shall stand for *M*. Depressed, for *N*. Inclined to the right hand for *P*.

To

To the left hand for *Q*.

The torch at the right hand being moved towards the left hand, and that at the left hand, being at the same time moved towards the right hand, shall signifie, *R*. The right hand torch being enclined to the left hand, and the other at the same time being elevated signifies, *S*: being depressed, *T*. The left hand torch being enclined to the right hand, and the other at the same time being elevated, signifies *W*: being depressed, *X*.

The right hand Torch being enclined to the right hand, and the other at the same time being elevated, may stand for *Y*; being depressed for *Z*.

When any thing is thus to be expressed; the two torches, being discovered, must remaine without any motion, so long, till the confederate shall by other lights shew some signe, that hee is ready to take notice. After

every one of these particular motions, the torches must be carefully hidden and obscured, that so the severall letters expressed by them, may be the better distinguished.

The day-time informations by smoke, cannot so conveniently be ordered according to this later contrivance. And therefore must be managed by some of those other wayes, that were specified before. To which purpose there must be some tunnells provided for the orderly inclosing and conveying up the smoke. The other particulars concerning this, are in themselves easie enough to bee apprehended.

How these significatory signes will be visible at a great distance; How by multiplication of them in severall places, they may be contrived for many scores of miles; will easily bee discerned from the situation and use of Beacons: by which the intimations of

See Bartla. Argen. lib. 1

of publike danger and preparations, have been oftentimes ſuddenly ſpread, over this whole Iland.

This may further be advantaged, by the uſe of *Galilæus* his perſpective.

'Tis ſtoried of the Inhabitants in *China*, that when any Merchants doe happen upon the ſhores of that Kingdome, they are preſently examined, whence they come, what commodities they bring, and of what number they are; Which being knowne, the watch (ſet for that purpoſe) doe preſently informe the King of their anſwers, by ſmoke in the day, and fires in the night: Who by the ſame meanes do's as ſpeedily returne them his pleaſure, whether they ſhall be admitted or kept out. And ſo that is eaſily diſpatched in ſome few houres, which could not be performed the ordinary way, without the trouble of many dayes.

Busbequius. Epiſt. Turc. ep. 4.

The practise of all these secret and swift Messages, may perhaps seeme very difficult at the first: But so do's also the Art of writing and reading to an unlettered man. Custome and experience will make the one as facill and ready as the other.

Polyb. lib. 10.

That these wayes of information already explained, whether by the species of *sound* or *sight*, are the same with those intimated in *Nuntius inanimatus*, may be clearely evident, to any one who do's but thoroughly peruse that discourse, and compare it with divers other the like passages, of the same Author, in his *Domingo Gonsales*.

1. For the species of sound, his words are these. *Auribus nihil percipi nisi per sonum, neminem fugit. Erit igitur necesse ut is, cui aliquid audiri mediante nunciatum fuerit, sonos audiat, eosque distinguibiles pro numero audiendorum; quæ cum sint infinita, infinita etiam sit oportet, sonorum edendorum varietas.*

Nunt Inani. pag. 16.

rietas. Satis tamen erit ut distinguantur vel genere, vel tempore, modo etiam & numero. Which passage, together with that other invention in *Domingo Gonsales*, concerning the Language of the Lunary Inhabitants, before explained in the eighteenth Chapter: I say, both these, being compared with the discoveries and experiments of the same kind, that are here discoursed of, may plainly manifest, that they are both performed by the same means.

2 For the Species of sight, his words are these. *Si oculis amici absentis aliquid cupis representare, idque citius quam corpus aliquod sublunare ad locum tam longo intervallo disiunctum possit perferri; oportet ut ideæ, sive formæ visibiles, augeantur quantitate, multiplicentur numero, & pro rerum significandarum varietate varientur, vel qualitate, vel quantitate, vel situ, vel ordine.* Which passage being compared with that other way of compact, betwixt *Gonsales* and his man *Diego*, mentioned in the other

Nunc. Inanim. p. 16.

Man in the Moon. pag 25.

Discourse; It may evidently appeare, that the wayes of intimation, which were there meant, are performed after the same manner, according to which they are here discoursed of.

He does indeed mention out of *Busbequius*, the practice of these informations amongst the inhabitants of *China*. And thinks that they were used too by the *Romans*, but withall he wonders, how that now amongst us, they should be altogether forgotten, and the restoring of them to these places and times, seems to be his chiefe ayme, in the promises of that discourse.

The particular example which hee mentions, is this. Suppose that one at *London*, would send a message to *Bristow*, *Wells*, *Exeter*, or though it were any remoter place: *Neque enim longinquitatem viæ multum moror, si detur facultas sternendi, & permeabilem efficiendi.* That is, the greatnesse of distance can be no impediment, if the space betwixt be

be fitted with ſuch high Mountaines, and Beacon Hils, as may ſerve for theſe kinde of Diſcoveries. Suppoſe (I ſay) this Meſſenger ſhould ſet forth from *London*, in the very point of noon, hee would notwithſtanding, arrive at *Briſtow* before twelve of the clock that day. That is, a Meſſage may by theſe means be conveyed ſo great a diſtance, in fewer minutes then thoſe which make the difference betwixt the two Meridians of thoſe places.

If according to this, we ſhould interpret, that paſſage out of *Trithemius*, concerning the three *Saturnine* Angels, that in twenty foure houres can convey news from any part of the World; that Author might then, in one reſpect be freed from the aſperſion of Diabolicall Magick, which for this very reaſon hath heretofore been imputed to him. But this by the way.

See before *Cap.* 15.

It may be, the reſolution of thoſe great promiſes in *Nuncius Inanimatus*, to ſuch

such easie causes as they are here ascribed unto, will not be answerable to mens expectation. every one will bee apt to mistrust som greater matter then is here exprest: But 'tis thus also, in every other the like particular, for ignorance is the mother of wonder, and wonder does usually create unto it self many wilde imaginations, which is the reason why mens fancies are so prone to atribute all unusual and unknowne events, unto stranger causes shen either nature or art hath designed for them.

Conclusion.

Horat. lib. 1 Od. 10. Ovid. Metam. lib. 11 Homer. in Hymnis.

The Poets have fained *Mercury* to be the chiefe Patron of Thieves and trechery,

ἀρχὸς φωλευτῶν.

Nat. comes Mytholog. lib. 5. cap 5.

To which purpose they relate that hee filched from *Venus* her girdle, as shee embraced him in congratulation of a victory, that hee robbed *Jupiter* of his Scepter, and would have stolne his Thun-

Thunderbolt too, but that he feared to burne his fingers. And the Astrologers observe, that those who are born under this Planet, are naturally addicted to theft and cheating.

If it be feared that this Discourse may unhappily advantage others, in such unlawfull courses: Tis considerable, that it does not only teach how to deceive, but consequently also how to discover Delusions. And then besides, the chiefe experiments are of such nature, that they cannot be frequently practised, without just cause of suspition, when as it is in the Magistrates power to prevent them. However, it will not follow, that every thing must be suppreſt, which may bee abused. There is nothing hath more occasioned troubles and contention, then the art of writing, which is the reason why the Inventor of it, is fabled to have sowne Serpents teeth; And yet it was but a barbarous act of *Thamus*, the *Egyptian* King, therefore to forbid the learning of

Celi. Rhodiq. antiq. Lect. lib. 22. cap. 15.

of Letters. Wee may as well cut out our tongues, becauſe that member is *a world of wickedneſſe.* If all thoſe uſefull inventions that are lyable to abuſe, ſhould therefore be concealed, there is not any Art or Science, which might be lawfully profeſt.

James 3.

* *
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FINIS.